

COMMAND

MILITARY HISTORY, STRATEGY & ANALYSIS



ALSO INSIDE

**Sword of Allah • Blood For Oil
Summer of '42**



Reflections

by Lee Teter



DEALER INQUIRIES WELCOME

Copyright © 1988 BY CHAPTER 172 VIETNAM VETERANS OF AMERICA

The Vietnam Veterans of America present the inspirational art print "Reflections" by Lee Teter which gives visual definition to the purpose and meaning that "The Wall" has for Americans — not just a list of faceless names, but a place to visit and remember people we love, who fought for each other and America.

This Open Edition art print with an image size of 26" x 19", is printed in permanent inks on

collector quality, acid-free paper to give lasting, vivid color.

All proceeds benefit the Vietnam Veterans of America. The cost for each art print is \$50.00 plus \$3.25 shipping and handling. VISA and MasterCard are accepted. Complete the response card below and enclose check or money order.

T-SHIRTS AVAILABLE ON WHITE \$10.00 + \$2.50 SHIPPING (M - L - XL - XXL)

Name _____

Address _____

City _____ State _____ Zip _____ Phone (____) _____

Quantity _____ Amount Enclosed _____

☐ Check or Money Order

☐ VISA (13 or 16 digits) ☐ MasterCard (16 digits)

YOUR CARD NUMBER

Expiration date

(Have you filled out your credit card no. completely?) _____ MQ/YR _____

Signature _____

Please allow 4 to 6 weeks for delivery.

Vietnam Veterans of America, Inc.

Chapter 172

P. O. Box 276

Cumberland, MD 21502

Phone 301-777-7001



COMMAND

MILITARY HISTORY, STRATEGY & ANALYSIS

JAN-FEB 1993

ISSUE 20

Features

- | | | |
|--|--|-----------|
| David W. Tschanz | Cortés: Conquest of the Aztec Empire
The elephant is conquered by the flea | 12 |
| Michael Antonucci | Blood for Oil
The quest for fuel in World War II | 34 |
| Jim Bloom | Sword of Allah
The Moslem assault on the Byzantine Empire | 44 |
| Jack Greene & Allesandro Massignani | The Summer of '42
The proposed Axis invasion of Malta | 64 |

Departments

- | | |
|-------------------------------|-----------|
| Short Rounds | 4 |
| Command Magazine Index | 74 |

Cover art by David Fuller

RECAPTURE THE GLORY

On the 50th anniversary of World War II, a famed American artist re-creates his greatest work.



The work is sculptured in the round, so you can actually see the determination on every face.

Shown smaller than actual size of 12 1/2" in height, hardwood base included.

The Iwo Jima Memorial in Washington, D.C., is the ultimate tribute to the American fighting man. A timeless symbol of courage and determination. And now—on the 50th Anniversary of World War II—The Franklin Mint is working with the original sculptor, Felix de Weldon, to re-create this American masterpiece.

It's alive with action. With every bold detail brilliantly captured in a rich sculptor's blend of powdered bronze and resins.

Bring the full power and glory of the American spirit into your home. the issue price, \$295. Enter your commission by the specified date.

RETURN ASSURANCE POLICY

If you wish to return any Franklin Mint purchase, you may do so within 30 days of your receipt of that purchase for replacement, credit or refund.

THE IWO JIMA 50th ANNIVERSARY MEMORIAL

COMMISSION AUTHORIZATION

The Franklin Mint
Franklin Center, PA 19091-0001

Please mail by October 31, 1992.

Please enter my commission for The Iwo Jima 50th Anniversary Memorial, to be individually hand-cast for me in cold-chamber bronze, a sculptor's blend of powdered bronze and resins, and finished with a rich patina like that which characterizes the finest bronze sculptures.

I need SEND NO MONEY NOW. I will be billed for my sculpture in 5 equal monthly installments of \$59* each, beginning prior to shipment. A handsome hardwood display base, and a Certificate of Authenticity bearing the signature of Felix de Weldon, will be sent to me at no additional charge.

*Plus my state sales tax and a one-time charge of \$3 for shipping and handling.

SIGNATURE _____ ALL ORDERS ARE SUBJECT TO ACCEPTANCE

MR./MRS./MISS _____ PLEASE PRINT CLEARLY

ADDRESS _____ APT. # _____

CITY/STATE _____ ZIP _____

TELEPHONE NO. () _____
© 1992 FM 14036-6QHE-36

Editor: Ty Bomba

Art & Graphics Director: Larry Hoffman

Associate Editor: Chris Perello

Current Affairs Editor: Marty Kufus

Contributing Editors: Craig H. Barrett, Thomas M. Kane, Mike Markowitz, David Meyler, Andrew Preziosi, David Schueler, Carl O. Schuster, David V. Tschanz, L. Dean Webb

Business Manager: Chris Perello, 805/546-9596

Advertising Director: Amiee Stahl, 805/546-9401

Staff: Ding Bettinsoli, Janine Haake, Greg Perello

SUBSCRIPTION RATES: *Command* is published in two versions: the Newsstand version includes the magazine only; the Hobby version includes the magazine, plus a rules booklet, map and playing pieces to a board wargame. Subscriptions are available for both versions.

U.S. rates for the Newsstand version (magazine only) are \$17.95 for one year, \$29.95 for two years. Foreign subscriptions are \$29.95 for one year, \$53.95 for two years.

U.S. rates for the Hobby version (magazine with game) are \$26.00 for 6 months, \$45.00 for one year, and \$80.00 for two years. Foreign subscriptions are \$32.00/\$57.00/\$104.00 for surface mail, \$38.00/\$69.00/\$128.00 for air mail. California residents must add 7.25% sales tax.

Payment may be made by check (drawn on a U.S. bank), money order, international money order, Mastercard or Visa. Payment must be made in U.S. Dollars, payable to Command Magazine or XTR Corporation.

Mail orders to P.O. Box 4017, San Luis Obispo, CA 93403. Credit card orders may be made by phone (in US 1-800-488-2249; foreign 805-546-9596) or fax (805/546-0370).

Command Magazine (ISSN 10595651) is published bimonthly for \$17.95 per year by XTR Corporation, 3547-D South Figueroa, San Luis Obispo, CA 93401. Second class postage is prepaid at San Luis Obispo, CA 93401.

POSTMASTER: Send address changes to Command Magazine, P.O. Box 4017, San Luis Obispo, CA 93403.

SUBSCRIBERS: Let us know any change of address as soon as possible. If we receive notice of a change of address less than a week before mailing, we cannot guarantee your issue will be sent to the new address.

A Note From The Editor

The voting on issue no. 18 ended up like this, ranked from highest to lowest.

German/USA Armies Comparison	6.90
Short Rounds	6.78
Issue No. 18 Overall	6.72
Tet '68	6.66
Great Britain/Superpower	6.39
Hybrid Warships	6.15
The PAVN	6.06
Issue No. 18 Cover	6.06
I Remember	6.00
King Kamehameha	5.54
Israelites in Canaan	4.69
Drug Wars	4.57

In comparing no. 18 with the previous issue, 21% thought 18 was the better of the two; 24% thought no. 17 was better; while 49% thought the two issues were of about equal worth (leaving 6% of the respondents who hadn't seen issue no. 17).

You'll notice the three lowest ranked articles really took a beating. The written feedback that came in suggests the following general explanations for the first two. For Kamehameha: "If I can't pronounce the names, I'm not going to read the article." For Canaan: "I can't stand these ancient articles where the author has to end by saying, 'Of course, other archaeologists suggest none of this is true.'" As to Marty Kufus' stuff, the voting there is always made up of mostly nines and zeroes — with the latter group seeming to reject the idea "Current Events" have anything to do with military history: "His stuff never has any conclusions in it." Indeed.

Historical Era Preference

It's been a year since I've reported to you here on the readership's overall Historical Era Preference voting, so here that is.

The first number in each column below is from issue no. 18's voting; those in parentheses are from a year ago in issue 13. The "1st" column shows the percentage who listed that era as their first choice for articles; "2nd," of course, refers to their second choice, etc. The "Total" column gives the sum of the first three, thus showing the percentage of readers who place that era somewhere in their top three choices. The "Least" column lists the percentage who least want to see articles about that era.

Era	1st	2nd	3rd	Total	Least
Ancient	1 (8)	8 (6)	3 (6)	12 (20)	38 (15)
Classical Antiq.	5 (8)	8 (13)	14 (11)	27 (32)	1 (5)
Middle Ages	8 (3)	8 (7)	1 (10)	17 (20)	15 (9)
Early Modern	5 (2)	3 (3)	11 (9)	19 (14)	1 (8)
Napoleonic	2 (7)	11 (10)	9 (10)	22 (27)	12 (11)
US Civil War	3 (8)	8 (9)	18 (15)	29 (32)	9 (12)
Other 19th Cent.	11 (3)	8 (2)	8 (12)	27 (17)	3 (10)
WWI	4 (10)	18 (15)	11 (5)	33 (30)	1 (8)
WWII	35 (32)	20 (20)	11 (9)	66 (61)	6 (5)
Modern (1945+)	26 (18)	8 (15)	14 (13)	48 (46)	14 (17)

In the practical sense, as editor I've got to pay most attention to the numbers in the "Total" and "Least" columns. Looking there, the three most noteworthy developments I see are: 1) the "Ancient" period has suffered considerably; 2) "Other 19th Century" has moved up far enough to become part of the "Big Five"; and 3) "Early Modern" seems to be experiencing a "swell" of demand. (About point no. 2: since "Classical Antiquity" really didn't drop that far, I guess now we'll have to consider them the "Big Six": WWII, Modern, WWI, ACW, Other 19th, and Classical Antiquity.) Forward.

Ty Bomba
Editor, Command Magazine

SHORT ROUNDS

Weapons Backdate...

Torpedo Damage at Pearl Harbor: The Missed Opportunity

"I didn't think that the torpedo plane attack would be made, because I didn't believe that aerial torpedoes would run in Pearl Harbor."

— Adm. Husband E. Kimmel

The damage done to most of the US ships at Pearl Harbor was largely the result of aerial torpedoes. All five battleships struck by those weapons sank. The three battleships hit only by bombs sustained relatively minor damage. The 55-plane Japanese bomber force scored only one major hit: the devastating explosion of the forward magazine of the *Arizona*. In contrast, 20 of the 40 torpedoes launched hit their targets. The US fleet was not prepared for the torpedo attack — and recently discovered evidence indicates it should have been.

There were no torpedo baffles or nets in place at Pearl Harbor, even though the issue had been raised there as early as November 1940. The Chief of Naval Operations, Adm. Harold E. Stark, wrote to the fleet commander of the time, Adm. J.O. Richardson, stating that he was concerned

for the safety of the ships at Pearl because of the recent success of the British attack on the Italian fleet at Taranto. There 11 torpedo planes had scored five hits and one damaging near-miss against three battleships.

Stark asked Richardson to consider installing nets or baffles at Pearl Harbor, but the commander was skeptical. Stark pressed the issue further in January 1941, but Richardson again resisted, arguing anti-torpedo obstructions would hamper the movement of his ships.

Richardson may well have been discounting the danger of torpedo attack because of the then widespread belief throughout the US Navy that deep water was needed for aerial torpedoes to be effective. The Navy issued a statement on 17 February 1941 to the effect that a minimum depth of 75 feet of water was necessary for planes to successfully drop torpedoes. The statement was included in a circular sent to all fleet commanders. The water in Pearl Harbor was less than 50 feet deep, and Adm. Kimmel (just then taking over

at the base) concluded his facility was therefore safe from such attack.

But on 22 July 1941, the Office of Naval Intelligence received a report from Lt. Cdr. A.K. Morehouse, a US observer aboard the *HMS Ark Royal*, that explained the British Mk.18 torpedo was able to operate in water as shallow as 24 feet. Such a torpedo could easily work in the 40-50 foot depths of the Hawaiian anchorage. The report meant the Navy doctrine regarding shallow-water aerial torpedo attack was dangerously out of date. Yet there were still no nets or baffles in place on 7 December.

It's not clear from the archival records what happened to Morehouse's report. The circulation list indicates a copy went to the "C-in-C US Fleet," but by July 1941 that title was actually no longer in official use. Adm. Kimmel had become "CINCPAC" (Commander-in-Chief Pacific), but his predecessor had been designated "CINCUS." It is therefore likely, but not certain, Kimmel's staff received a copy of Morehouse's re-

port, where it may have been passed over due to clerical error.

The torpedo depth item was the fifth topic in the report, and it was left off the table of contents on page one. On the other hand, though, item number four was fairly provocative: "Summary of British Air Attacks on Italian Harbors by Naval Aircraft." For whatever reason, the Navy failed to grasp the crucial notion that shallow water was no longer a guarantee of safety from aerial torpedo attack. This failure of comprehension may also be traced to the belief then still prevalent among most of the world's naval officers that ships were safe when at anchor.

The first half of World War II saw a number of successful attacks on ships in harbor: the sinking of *HMS Royal Oak*, the destruction of the German cruiser *Königsberg*, the crippling of the French battle squadron at Oran, the sinking of three Italian battleships at Taranto, and of course, Pearl Harbor. These attacks demonstrated the inter-war advances in air power, but they were all made more successful than they might otherwise have been due to the defenders' poor state of preparedness.

A warning of the growing danger had in fact first been sounded in the US

Navy by Lt. Cdr. Logan Ramsey, in a 1937 essay he wrote for *Proceedings*, entitled "Aerial Attacks on Fleets at Anchor." In it, Ramsey correctly foresaw air power had made ships safer at sea than in harbor.

The irony is it was also Logan Ramsey who picked up a radio microphone on 7 December 1941, and announced to the world "Air raid, Pearl Harbor — this is not a drill!"

—C.P. O'Connor

Historical Perspective...

The New Model Army

By the summer of 1644 the English Civil War had been raging inconclusively for over two years. While the Parliamentary forces controlled East Anglia and the London home counties, the Royalists held Wales, the southwest, and the north. Neither side seemed able to score the decisive blow. But that year events began to turn in favor of Parliament; the Solemn League and Covenant brought Scotland in on that side.

On 2 July, two Parliamentary armies, under Lord Manchester and Sir Thomas Fairfax, totaling 21,200 men, attacked a 17,000-man Royalist force at Marston Moor. Despite their numerical superiority, the Parliamentarians were losing the battle until Oliver Cromwell's "Ironsides" cavalry successfully turned the tide. The result was a smashing defeat for the Royalists, who lost at least 3,000 dead and 1,500 prisoners. Royalist power in the north of England was shattered.

A Parliamentary victory seemed imminent, but within a few months the "Roundhead" cause was again almost as bad off as before Marston Moor. One Parliamentary army, under the Earl of Essex, had

been ignominiously defeated, while another, under Lord Manchester, had allowed a potential victory at Newbury to slip away. As the year's campaigning drew to a close, it seemed the hard won northern gains had all been handed back in the south.

The House of Commons reacted by investigating why and how the glittering opportunity presented at Marston Moor had been squandered. Their findings put the blame squarely on the structure and nature of the Parliamentary armies. Finally, on 19 November, the Commons formed the "Committee of Both Kingdoms" (chaired by Cromwell), with the mission to consider a new and more effective "form or model of the whole militia."

The root of the problem lay in the way troops were raised and paid. Regiments were usually recruited by nobles or gentry (such as Cromwell); equipment and pay were supplied by the local County Committees. Not surprisingly, those Committees tended to be reluctant to pay out more than the absolute minimum. Left underpaid (or unpaid), regiments quickly declined in fighting spirit. Like mili-

tias everywhere in all times, the Parliamentary units tended to be badly disciplined, poorly led, and liable to high desertion rates when sent away from their home areas. Cromwell's Ironsides were one of the rare exceptions; he had hand-picked his men for their religious enthusiasm, and he maintained a strict discipline.

On 6 January 1645, the Committee of Both Kingdoms issued its final recommendation. In it, they called for a nationally recruited "New Model Army" of 21,000 men, to be paid by a Parliamentary tax, and to be professionally trained and disciplined. Most revolutionary of all, the officers were to be chosen on merit. This was an unheard of concept in a time when all officers were nobles and all soldiers

commoners. The House of Lords looked on the whole notion as dangerous nonsense.

Fortunately, the Committee's proposals received a strong boost from a political fight then developing among the Parliamentary commanders. Oliver Cromwell blamed the autumn defeats on his immediate superior, Lord Manchester. He claimed Manchester showed "some principle of unwillingness to have the war prosecuted to a full victory; and a desire to have it ended by an accommodation on some such terms to which it might be disadvantageous to bring the king too low." In plain English, Cromwell made the case Manchester was a closet Royalist.

Manchester struck back hard, charging Cromwell

Ironsides and Cavalry Tactics

Cromwell's cavalry regiments were not called "Ironsides" for nothing. During the key years of the Civil War (1643-45), they were the best troops in England.

Contrary to what one might assume, however, they did not get their nickname from their armor. All cavalry of the day wore armor, either steel back- and breast-plates, or heavy leather buff coats. Helmets were also standard issue.

Cavalry tactics at the start of the war were confused. Usually the horsemen would canter up to close range and blaze away with pistols. Eventually, though, most cavalry commanders realized that a tactic of charging would be a more effective way to employ their units. But discipline was so poor that a successful charge tended to disorganize the victorious cavalry as badly as their victims. Individual troopers wound up all over the field, pursuing individual opponents or looting, and any unit that charged was generally out of action for the rest of the day.

Cromwell's troopers were different. After each charge they quickly reorganized and stood ready to go again. It was this unbreakable discipline that won them battle after battle and earned them the sobriquet "Ironsides." Later, Cromwell extended those same habits to the cavalry of the New Model Army.

himself was not fighting hard because a quick victory would weaken the position of the radical Protestants with whom the latter sympathized.

The Commons' solution was "sack 'em all!" The house passed the "Self-Denying Ordinance," which stripped all ministers (both Lords and Commons) of military rank. The idea was both to eliminate the crippling internal disputes and to demonstrate Parliament's determination to build an army that could win a war.

While the Lords fumed over the Ordinance and the New Model, the Commons went ahead and nominated Sir Thomas Fairfax to command it. That was a brilliant move. Fairfax was both a noble and a proven and popular officer, and many Lords

were willing to accept the New Model Army if it had Fairfax at its head.

Ten cavalry regiments were soon built from existing Parliamentary units, with Cromwell's Ironsides forming the hard core. Twelve infantry regiments organized the best of the Parliamentary foot as cadres and made up the remainder of their rosters through impressment.

Fairfax had been ordered to forge an instrument of victory, and he took the measures necessary to do so. Strict professional discipline became the rule. Deserters, mutineers and thieves were hanged; blasphemers had their tongues burned through with hot irons. There was no favoritism; every regiment, including Fairfax's own, had to take its turn marching at the dusty rear of the column. All regiments wore the same red coats — the first standard uniform in English military history.

Horrified aristocrats depicted the New Model as a horde of grungy commoners, but the majority of its members were actually from the freeholders and gentry (the 17th century's equivalent of the middle class). Nor was it, at least initially, an army of Puritan fanatics; there was no selection for religious enthusiasm such as Cromwell had used with his Ironsides. Only in later years did the cadres of old volunteers within the ranks make the New Model famous for preaching and praying.

As the campaign of 1645 opened, the barely-formed army, still short on manpower, was forced to take the field in response to a Royalist offensive. The Royalists at first paid little

attention to the New Model, derisively labelling it the "New Noddle Army." At the Battle of Naseby, though, on 14 June, the Kings' men learned the error of their thinking. That battle was, if anything, an even more crushing repeat of Marston Moor. The Royalists there lost 1,000 dead and 5,000 prisoners, against Parliamentary losses of fewer than 200.

A long series of relentless Parliamentary victories followed Naseby, with the New Model Army, already formidable, improving steadily in discipline and enthusiasm. By the end of the First Civil War in 1646, it had evolved into a fast, resilient, and completely professional force.

The New Model Army was, in fact, the only really professional force in Europe at the time. In the years that followed, it proved its capabilities again and again, often against heavy odds. In 1648, it crushed King Charles' ill-fated Second Civil War in a few months. In 1649-51, it did what no English army had ever done before — defeat both

the Irish and Scots on their home grounds.

Though the army's increasing political and religious radicalization eventually led it to revolt against Parliamentary control, it never rebelled against its own leaders, and it became Cromwell's instrument of government during the eight years of the Protectorate. That role, however, proved to be the army's downfall. It was disbanded in 1661, as part of a fierce effort to abolish every vestige of the Protectorate. The New Model, victorious on every battlefield, was finally defeated where it had been born — in Parliament.

Taking a longer view, though, it can be said the New Model Army triumphed even in its final defeat. Its red coats were adopted by the later British army, as were its standards of strict professional discipline. The regiments which would carry the British flag across the world throughout the 18th and 19th centuries owed their genesis to the New Model, England's first professional army and the finest of its day.

— Robert Hobart

Order of Battle The New Model Army



A typical infantry regiment held 800-1,000 men, fewer among the cavalry. Cavalry usually fought mounted, and were armed with sword and pistol. Dragoons fought dismounted, and were armed with a matchlock carbine. Two-thirds of the infantry carried matchlock muskets, the rest had pikes. Cannon were rare and were employed primarily in sieges.

Mysteries Revealed. . .

"Close" Air Support in WWI

One of our readers, Michael Woodger, was skeptical when he read in issue no. 16's article "Close Air Support in World War I: The Western Front," by Arnold Blumberg, about the incident in which a German infantry commander was reportedly bowled

over by the wheels of a low flying British plane. Woodger tracked down the source and was pleased to find the following amplification of that episode. It's taken from an eyewitness account by a bugler of the German 8th Grenadier Regiment.

As we were moving forward again...toward the firing line after crossing the Somme, there suddenly appeared before us some 20 British aeroplanes, which dived to a height of about 100 to 200 metres, and then, continuing to within 2-3 metres of the ground, attacked us with their machine-guns. At first we thought they intended to land, but we speedily saw the danger, and opened a vigorous fire upon them. Several "Tommies" flew so low that the wheels of their aeroplanes touched the ground. My company commander, Lt. Nocke, had to fling himself flat on the ground, but for all that was struck on the

back by the wheels of one machine, thus being literally run over. Not far from me an aeroplane appeared at about one metre above the ground, making straight for me and for the moment I did not know in what direction to throw myself: the pilot appeared determined to run over me. At the last moment I was able to spring clear as the machine whizzed past me and through the firing line. It then turned, climbed a little, and sought to repeat the maneuver, whereupon it was hit by one of the companies firing on our left and brought down. In all, five enemy machine were shot down in our battalion's area.

day before the German invasion), and went back to Moscow.

The second show went off without any trouble, and Stalin was pleased with the performance of the BM-13. He ordered its manufacture for front line use with the army, with but one change. He ordered the rocket ammunition be referred to as 132mm, not 130mm. The actual size of the rockets wasn't changed, just the designation.

Never again did artillery shells show up where rockets were needed, or vice versa. Despite the fact wartime manning shortages required some ammunition processing to be handled at times by those little older than children, raw recruits, or even German prisoners of war, order mix-ups were all but unheard of. A request

for 130s meant artillery shells, and an order for 132s meant rocket rounds. (Later, when the rockets were redesigned in 1942, they were increased in actual size to 132mm.)

This vision of Stalin about ammunition designations was extended to all the Soviet weapons of war, and led to many different "sizes" of ammunition being in nominal use. In practice, the system streamlined Soviet supply, since every weapon type had one and only one ammunition "size" that corresponded to it. Thus, mortars, grenade launchers, howitzers, rockets and tank guns all had their own completely distinctive sizes of ammunition that could easily be identified and supplied without error — a great aid in the heat of battle.

—L. Dean Webb

Movers & Shakers. . .

Stalin on Ammunition Requisitioning

Josef Stalin was, of course, the man everybody wanted to please during his tenure as "Maximum Leader" of the Soviet Union. Though he was usually happiest when things ran perfectly, there was one instance when a mistake actually gave him cause to celebrate. The incident took place shortly before the Nazi invasion of the USSR in June 1941.

Stalin attended a demonstration of one of the new, and still highly secret, "BM-13" rocket launchers (later dubbed "Katyushas," and "Stalin's Organs") These rockets measured 130mm across the base, which, coincidentally, also happened to be the bore measurement of one of the conventional cannons in the Soviet

inventory. Unthinkingly, the Red Army officer in charge of the demonstration ordered "130mm ammo" to be delivered at the proper time and place. The soldiers delivering the rounds, however, knew only of the conventional 130mm cannon ammunition. Naturally, that's what they brought to the test range.

No photos exist showing the expressions on the attendees faces when the ammo crates were opened in front of Stalin, revealing the wrong items had been sent. Reportedly, the NKVD (precursors to the KGB) agents present were immediately ready to round up everyone responsible for the mistake, but Stalin stopped them. He set up another demonstration date, 21 June (the

I Remember. . .

An Insider's View of the Bundeswehr

[Ed's Intro: Here's one Panzergrenadier's view of the NWO.]

When I joined the 3rd Batterie des Panzerartillerie-battalion 195 (3rd Battery/195th Mechanized Artillery Battalion), in 1987 in Münster, Germany, I did not have the slightest idea how the following months of military service would affect me.

In Germany, military service is compulsory. A law passed in 1956 states that all males between 18 and 35 are subject to conscription. Women have

only entered the Bundeswehr (Federal Armed Forces) in small numbers as physicians, and they are never required to serve.

During the 1980s, mandatory service for conscripts lasted 15 months, with a total of about 500,000 troops — conscript and volunteer — serving at any one time. (The 1989 Reunification Treaty requires the newly united German armed forces to be reduced to a grand total of 370,000 by 1995.)

Since the end of the Cold War, the Bundeswehr

has begun to suffer a crisis of legitimacy. Many young men no longer understand why they must still serve. More than half of the potential conscripts — some 150,000 — declared themselves to be conscientious objectors in 1991. Such a declaration allows them to spend their national service obligation working in youth hostels, nursing homes and other social institutions.

Though I was no great fan of the *Bundeswehr* when I was drafted, I never thought seriously about getting out of it. Not going to the army merely because one didn't want to seemed a lame excuse to me, and I generally agreed with the government's maxim: "*Kämpfen können, un nie kämpfen zu müssen.*" That is, be able to fight in order to never have to fight.

So on 1 October 1987, I "surrendered" my civilian life to the German army. The first indication I was in a new world came when I was told soldiers could not go to the dining hall on their own. We had to wait until a sergeant or officer led us in. I thought that was ridiculous, but boot camp is boot camp the world over.

A similarity between the *Bundeswehr* and the US Army is their shared obsession with cleanliness. Everything — weapons, equipment, the most hidden corner of your room, and most of all your boots — must be absolutely clean. And, of course, at inspections it is always an officer who determines if something is clean or not — the officer's truth is the only truth.

Non-commissioned officers (NCOs, or sergeants) account for fully

35 percent of the German armed forces, commissioned officers make up another 20 percent, leaving the low-ranking conscripts to fill out the remaining 45 percent. We often felt outnumbered.

The NCOs in my basic training unit soon labeled me as someone who asked too many questions.

"How can our boots be clean if we just came out of the mud?" I once stupidly asked. "It's impossible for them to shine if they've just been in the mud!"

The NCOs just smiled, and one of them quipped, "Your boots have to be in perfect condition at all times and under all circumstances!"

Then another NCO asked me if I'd just graduated high school.

"Yes, sir," I replied, trying to figure out what dirty boots had to do with graduating high school.

"Hal!" he said, "I knew it! It's always these new high school graduates who ask the silly questions!"

I soon learned not to ask questions, and instead just concentrated on surviving basic training, which lasts for the first three months of your service time.

The main emphasis in basic training is giving all the new soldiers basic infantry skills. They simulate skirmishes on the battlefield by sending you through obstacle courses. Still another skill German soldiers must learn to master is parade ground marching, euphemistically called "formal service."

During formal service drill, we learned to make proper turns and how to greet our superiors. If you made a mistake, you had

to run as fast as you could, then stand completely and instantly still upon command, then line up to start it all again. "Why?" I asked myself silently.

One telepathic sergeant explained, "The aim of this drill is simply to break the will of the soldiers."

At the time, that sounded pretty sinister to me. I suddenly realized how naive I had been to ever believe there were any democratic features to military service. You see, another maxim of the German government is that our post-World War II soldiers are merely "citizens in uniform." That's unlike the military of the Weimar Republic, who formed an authoritarian elite. This concept is the main reason the government still does not want to give up its conscript army, even now that reunification has been accomplished. They fear the rise of a volunteer army and its turning into a "state within a state."

Aside from the past four decades of German history, another impediment the NCOs face in trying to fully "break the will" of the recruits is the fact most soldiers are allowed to go home on weekends. In that way, I was able to muddle through my military service from Monday to Friday while still keeping my will intact. I lived only for my civilian weekends.

Living for the weekends continued even after basic training. While those first three months of service were hard because they were physically exhausting, the remaining 12 months seemed endless because they were mentally numbing. Cleaning our weapons and equipment

over and over again, simply because there was nothing real for us to do, again didn't seem to make much sense to me.

The duty unit I was assigned to in January 1988 was the Flak Group of the 1st *Batterie* of an artillery battalion belonging to *Panzergranadier Brigade 19*. The "group" consisted of two NCOs and six conscripts, and we were responsible for operating an FK-20, a 20mm anti-aircraft gun.

In war, our task would have been to help provide air defense for the vehicles of the battery. During our peacetime maneuvers, this was performed with the FK-20s always in the rear of the column. In times of war, though, we were told we would suddenly be moved to somewhere near the front of the line. This, of course, was another aspect of things that made us feel uneasy. We all knew that during World War II German "Flak" gunners such as ourselves were often used in the very front of the fighting for everything but air defense — the gunners won an admirable record for themselves there, but their casualty rates were high.

One of the main difficulties for our unit was aircraft identification. Our sergeant told us that during World War II fully half of all the aircraft shot at by German Flak in fact belonged to the German air force. We practiced at aircraft identification all the time, but to my mind there has really been no significant improvement in this since 1945.

Though our maneuvers took place as the Cold War was ending, we still used terminology from that era.

We were always "blue land," defending and counterattacking against the forces of "red land."

Presently the German government is trying hard to expand the role of the *Bundeswehr*. They argue Germans have to contribute more than rhetoric

and money to world security if they want to avoid being labeled cowards by the other Western nations.

This debate was exacerbated by the Gulf War, during which Germany gave money, but sent no troops, to the anti-Iraq Coalition. Many Ameri-

cans seemed to see this as Germany taking an easy way out of trans-Atlantic burden-sharing.

But few seemed to understand that even if a majority of Germans had wanted to participate more fully in the Gulf War, we could not have done so. The German Constitution (or "Basic Law of 1949") prohibits the involvement of German soldiers outside of the NATO area. But with the prospect of permanent German membership on the UN Security Council looming, the main government parties, from left to right, are trying to rewrite that law to allow deployment of German forces in

UN peacekeeping missions. Some rightist groups, like the Christian Social Union in Bavaria, seem to want to "send Germans to the front" sooner, rather than later.

These days I live in the United States while attending college; the Cold War is fully over, and I have put some time between me and my military service. All in all, if I could choose again, I think I would have taken the conscientious objector route. I have figured out for myself that the use of armies is an inappropriate means of preserving peace in Europe.

— Stefan Ruckelshaus, as told to Marty Kufus

In Sum...

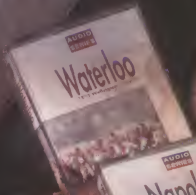
US Army Friendly Fire Engagements in Desert Storm

The following is a tabular summary of the US Army's "friendly fire" mishaps during Operation Desert Storm. The information was extracted from the 26 August 1991 issue of *Army Times*.

Date	Incident	Circumstances	Action	Result	Cause
2 Feb	Ground surveillance radar	None	High-speed anti-radiation missile locked on secondary target	2 wounded	Missile
14 Feb	Dismounted troops	None	Clearing village of suspected enemy	3 wounded	Grenade and rifle fire in buildings
17 Feb	1 Bradley	Night, low visibility	Air-ground misidentification, Apache using night sight	2 killed, 6 wounded	Chemical energy rounds
26 Feb	2 M1A1s	Night, heavy rain, low visibility	Attack on fortified position, misidentification	No casualties	Kinetic & chemical energy rounds
26 Feb	3 Bradleys	Blowing sand, low visibility	Movement to contact, engaging enemy using thermal sights only	2 killed, 6 wounded	Kinetic and chemical energy rounds
26 Feb	2 Bradleys	Dark night, hazy	Movement to contact, engaging enemy misidentification	No casualties	Kinetic & chemical energy round
26 Feb	Dismounted troops	Reduced visibility	M113 APC lost forward of friendly lines, misidentified following Iraqi tank attack	3 killed, 3 wounded	Machinegun fire from M1A1
26 Feb	Dismounted troops	None	Premature airburst of artillery fire	1 killed	DPICM submunitions
27 Feb	5 M1A1s, 5 Bradleys	Night, heavy rain, low visibility	Movement to contact, attack on Iraqi positions, misidentification through thermal sights	6 killed, 25 wounded	Kinetic energy rounds
27 Feb	3 Bradleys	Clear daylight	Misoriented unit, attack on fortified position, misidentification at 2,000 to 2,500 meters	2 killed, 9 wounded	Kinetic energy rounds
27 Feb	2 Bradleys	Night, rain, low visibility	Attack on Iraqi positions, misidentification	1 killed, 1 wounded	Large and small kinetic energy rmds
27 Feb	2 Bradleys	Rain, smoke	Attack on bunker complex, misidentification	1 killed, 2 wounded	Kinetic energy rounds
27 Feb	1 Bradleys	Night, overcast, smoke, dust	Scouts screening flank, meeting engagement, misidentification	2 killed, 2 wounded	Small kinetic energy rounds
27 Feb	Dismounted troops	None	Lack of coordination between units, misidentification	1 killed, 1 wounded	Machinegun fire



History comes the nearest you to being there



Introducing a major new video series

Military history comes alive with *Campaigns in History*, a major new video series exploring the incredible stories behind some of the greatest moments in the history of warfare.

Accurate feature film footage, authentic modern reconstructions, the latest 3D computer mapping techniques and an in-depth analysis of each campaign by Dr David Chandler, one of the world's foremost military authorities, combine to breathe new life and action into pre-twentieth century military topics. Available for the first time on video.

Each video is presented with a free companion book on the military aspects of the campaign. For only \$29.95 per title.



The Zulu Wars 1879

Includes extensive feature film footage and an accurate reconstruction of the events at Rorke's Drift. Running time: Approximately 1 hour

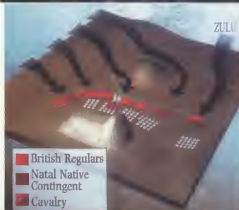
Also on cassette

By popular demand the soundtracks from these four great films are also available on audio cassette.

Masterfully narrated by Robert Powell, this superb set of four cassettes is ideal listening in car or as background to your favourite hobby. The complete box set of 4 cassettes is only \$29.95.

Waterloo 1815

Draws extensively on the Dino de Laurentis masterpiece 'Waterloo' along with accurate modern re-enactments. Running time: 1 hour



- British Regulars
- Natal Native Contingent
- Cavalry

Games alive! You'll ever get there.



The English Civil Wars

Features dramatic re-enactment footage of the armies and the events of the wars from 1642-1649. Running time: 1 hour 20 minutes



Napoleon 1812

With extensive footage from the Russian feature film *War & Peace* shot with over 20,000 extras. Running time: 1 hour 5 minutes

In the UK only the video titles Zulu Wars, Waterloo and English Civil Wars are available exclusively through WH Smith from November.

Video and Book

Each video comes complete with a free 96 page book on the campaign. Approximate running time of 1 hour 5 minutes.

Four Audio Cassettes

The titles included in this set are Napoleon, Zulu Wars, Waterloo & English Civil Wars. Approximate running time of 1 hour 5 minutes.

Complete Video Package

Order the complete package - ie, all four videos and books.

To order call toll free :

Phone US 1 800 285 4952
By post US



Cheques made payable to 'Campaigns in History', Send to Sturmer & Klein, 11900 Parklawn Drive, Rockville, MD 20852 Maryland residents add 5% sales tax

UK Call 0403 261554
Campaigns in History,
PO Box 142, Jubilee Estate,
Foundry Lane, Horsham,
West Sussex, RH13 5FJ.
UK £14.99 plus £1.95 p & p.

Only \$29.95

Plus \$2.95 for packing & shipping.

Only \$29.95

Plus \$2.95 for packing & shipping.

\$99.80 Save \$20

Plus \$2.95 for packing & shipping.

Cromwell
FILMS LIMITED

Cortés

Conquest of the Aztec Empire

by David W. Tschanz

Hernando Cortés was a womanizer, a drunk, an opportunist, a scoundrel, a fortune hunter, and deceitful. He was also fervently religious, personally courageous, diplomatically astute, persuasive, and an effective leader of men. In other words, he was the archetypal conquistador.

Born in 1485 in a tough peasant province of Spain, Cortés was distantly related to the conqueror of Peru, Francisco Pizarro (who was also a member of the expedition to Mexico). A brief period at the University of Salamanca was unsuccessful, but gave him enough education to be considered a man of letters. In 1504, at the age of 19, he sailed to the colony of Hispaniola and became a notary in a small village there. In 1511 he abandoned that post to join Diego Velasquez' expedition to conquer Cuba. He made himself prominent during that operation and was soon appointed King's Treasurer at Santiago.

Contemporary reports indicate Cortés was unable to conquer his "compulsive" womanizing, and his position soon grew precarious in the new colony. An opportunity to escape presented itself in 1518, when an expedition was organized to investigate more fully the indications of Aztec wealth first provided by Juan de Grijalva's expedition.

The new venture comprised 11 ships, 500 soldiers, 100 sailors, 16 horses, and a number of guns. Though initially organized by Governor Velasquez, Cortés was able to secure command of the expedition for himself by investing all his savings, along with every peso he could borrow. Velasquez, however, soon became wary of the over-eager Cortés and prepared to replace him. But Cortés caught wind of that plan, provisioned the ships and sailed the same night.

The fleet coasted along Cuba, stopping at several places for more supplies and volunteers. Despite the governor's issuance of an order for Cortés' arrest, no one tried to stop him.

The ships left Cuba on 10 February 1519, heading for the Yucatan Peninsula. At Cozumel, two persons, one a shipwrecked Spaniard and the other a disinherited Indian princess, joined the expedition. The Spaniard, Jeronimo de Aguilar, had been shipwrecked eight years earlier and had learned to speak Cozumel. The woman, named Malintzin, was fluent in Cozumel and Aztec. Through that interpretive triangle, Cortés was able to communicate with the natives he came across.

Malintzin, who was soon Christianized and given the name Doña Marina, became a powerful and important member of the expedition. She served as Cortés' advisor and occasional bedmate, bearing him a son and possibly also a daughter. Her standing among her own people was one of awe, and her significance in the events of the conquest is best attested by the fact Cortés was addressed as "Malinche" (the male form of *her* name) by Montezuma and the other natives.

The Landing — Man or god?

The Spanish fleet reached port at San Juan de Ulua, near present day Vera Cruz, on Holy Thursday in 1519. With the royal pennants flying from the flagship, they waited at anchor. Ambassadors arrived the next day from both the local cacique (chief), Tendile, and the Governor, Pitalpitocque. On Easter Sunday, the two Indians met with Cortés. After an exchange of gifts, the Spaniard asked for a meeting with the Emperor Montezuma himself.

The emissaries did not respond immediately, but ordered a message prepared for the Emperor. Paintings were made of Cortés, his captains, and their vessels, the cannons, Doña Marina, the horses, and even two Greyhounds. The paintings served two purposes — they were both a message and a kind of intelligence-gathering device.

During their preparation, Cortés attempted to impress his guests with the firing of guns and the galloping of horses, neither of which had ever been seen before therabouts. He succeeded to an extent, but Tendile was more fascinated by a helmet belonging to one of Cortés' soldiers. The chief asked if he could have it to send to Montezuma. Cortés, always the opportunist, quickly gave it to him, asking that it be "returned full of gold as a gift for our king."

Tendile's notice of the helmet was not based on its usage as an instrument of personal protection in war. He had seen in it a striking resemblance to the helmet worn by a god of the Aztecs feared more than any other — Quetzalcoatl.

The legend was a simple one. Quetzalcoatl had come among the Toltecs (the Aztecs' predecessors in Mexico) in the distant past as a chief of a strange group of men who had white skin and blond hair. He taught the Indians how to paint and work metal, developed their calendar, and was a source of beneficence until he was driven



away. The legend went on that he would one day return, messiah-like, to lead all peoples out of bondage. The Aztecs had adopted and extended the legend, fixing the year of the projected return as "Ce Acatl," which was indeed the year Cortés had arrived.

For the Aztecs, particularly Montezuma, the immediate question was whether these divine resemblances were merely coincidental, or Cortés was the god returned. It was a question that would trouble Montezuma all during the initial phases of the encounter.

When the helmet arrived at his palace, the emperor refused to touch it, and sent it to the priests. His fear the conquistador was actually a god pushed Montezuma into a kind of panicked inertia and indecision.

An Aztec prince, Quinatlbior, returned to Cortés' camp with Tondile a week later, bearing with him gifts from Montezuma. Among them was the soldier's helmet, full of gold. The message from Montezuma was flowery. He was pleased such valiant men had come to visit and would be very happy to meet the emperor of these men, but as that was not possible he was sending a gift of precious stones for him. As a meeting with Charles V was not to be, it would also be unnecessary for Cortés to advance any farther.

Cortés was, of course, disappointed by the reply, and became more concerned when promised supplies dwindled and then stopped entirely. Fear swept through the camp along with a rumor this was a prelude to an attack, the goal of which was to capture the Spaniards and "breed them for sacrifice." In actuality, it appears to have been nothing more than an attempt by Montezuma to signal the Spaniards their stay was over.

Governor Velasquez's partisans in the expedition began to complain about the heat, mosquitoes, sand fleas, and lack of provisions. They further charged the expedition had changed from one aimed at adding territory to the holdings of the king to one aimed at enriching Cortés. They called for a return to Cuba.

In order to abort such a move, some of Cortés' captains (secretly encouraged by him) argued they had come to settle a new land, not loot it. They also argued against a return to Cuba, claiming Velasquez would then surely seize what little had been gained. They persuaded the men to go to Cortés and formally invest him with the title of "Captain General." In front of those men, Cortés put on a charade of uncharacteristic modesty. It was, as the chronicler Bernal Diaz recorded, "A case of 'Press me harder, but I am very willing.'"

Cortés drove a hard bargain, demanding the men make him Chief Justice, as well as Captain General, and that he be granted one-fifth of all gold taken — the same proportion as the law required be set aside for the king himself. Further, the election of Cortés as Captain General created a legal fiction. That is, as the head of a new settlement, he was now free of his previous obligations to Velasquez. Thereafter Cortés could argue, as he often did, that all he did was for Charles V, and not for the man who had commissioned the expedition.

Vera Cruz and Cempoala

The settlement at Vera Cruz took several weeks to complete. Then Cortés decided to march to the large town of Quiahuiztlan to meet with the cacique there. On his way his men had to pass through the town of Cempoala. They sent messengers ahead, announcing their imminent arrival.

Cortés, always cautious, arrayed his men in battle order as they approached the first large Indian town they would encounter.

They received a warm welcome. The Cempoalans were recent additions to the Aztec Empire. The leader of the town, so ponderously fat that Díaz never names him, but only refers to him as "the fat cacique," was not pleased with being a vassal of Montezuma. He was emboldened by Cortés' introductory statement that the Spaniards served a different emperor, and he launched into a litany of complaints against the overlords of Tenochtitlan.

Cortés listened and assured the fat cacique he would set things right in the near future. But first, the conquistador continued, he wanted to visit the city of Quiahuiztlan and take up residence there. The fat cacique nodded his agreement and supplied the Spaniard with 400 porters as a token of his good faith.

Quiahuiztlan stood amid rocks and cliffs and was a virtually impregnable fortress. But when Cortés approached the place, instead of encountering resistance, he found it abandoned.

Cortés and his men entered, looking for any signs of life. Finally they were met in the market square by 15 leaders and priests who waved incense around the Europeans and bade them welcome. Sheepishly they explained their people had fled at the sight of the horses, and were waiting to see what kind of creatures the newcomers were.

Cortés launched into what was quickly becoming a standard opening speech. He explained the Spaniards were the subjects of the great Emperor Charles; they were worshippers of the one true compassionate God and adherents to the Virgin, and they had come in peace to undo injustices.

As he finished, the fat cacique of Cempoala entered the square borne on a litter and joined the conversations of the Quiahuiztlanis (who were also of his Totonac tribe). After the fat cacique had explained to them the kind of men the Spaniards were, all the Indians again began complaining to Cortés about their Aztec masters. It was exactly what the Captain General wanted to hear.

A few days later, Aztec tax collectors arrived, putting fear into the Totonacs. They upbraided

Who Were the Aztecs?

The Aztecs arrived in the Central Valley of Mexico from a myth-shrouded region they called "Aztlán," around 1200 A.D. They believed they were a chosen people whose tribal god, Huitzilopochtli, had promised to lead them to a site where there would find an eagle on a cactus.

They temporarily settled an area of barren land infested with poisonous snakes. They were a tough and determined lot, and their legends claimed they ate the snakes and prospered. At the same time, they hired themselves out as mercenaries to the neighboring tribes, and in doing so earned a reputation for both valor and unmitigated cruelty. On one such occasion, they were hired by Coxcoxtli, the Cacique of Culhuacan, to subdue a neighboring city-state. They returned from the battle with several thousand trophy ears they had cut off the heads of their enemies.

Huitzilopochtli, never a deity to abide stable situations, told his people to seek a "woman of discord," for the Aztecs were not to remain where they were. They were to continue their search for the eagle on a cactus.

Ever obedient, they asked Coxcoxtli for his daughter — to become the wife of the god and a goddess in her own right. The chief sent the young woman, said to be as beautiful as a "precious necklace." Upon her arrival, she was flayed alive and killed as an offering to Huitzilopochtli. A priest, in accordance with the rite of the mother goddess, Tlazolteotl, put on her skin.

Eventually her father, accompanied by other nobles, arrived to honor the new goddess. Meeting the skin-clad priest in a darkened sanctuary, the Culhuacan offered sacrifice, and then in the glow of the burning incense, recognized the reality. He was understandably

horrified, and along with the other nobles present, attacked the Aztecs.

The Aztecs fled across a nearby lake, making rafts of their shields for their women and children. Thus escaping, they finally wandered to the site where Huitzilopochtli had been directing them all along. They stopped when they came upon a prickly pear cactus on which perched an eagle grasping a snake in its talons. There they built a temple and settled down, founding the lake-island city of Tenochtitlan — "The Place of the Cactus."

In a literal sense, the Aztecs built themselves a homeland. With pilings and reed mats, they staked out plots in the shallows and gradually expanded the size of their island. Other Aztecs settled on the smaller adjacent island of Tlatelolco.

Both groups provided themselves with fertile farming land by scooping up the rich soil from the bottom of the lake and arranging it in plots among the shallows. They planted maize, peppers, beans and squash in these *chinampas*, or "floating gardens." As time passed, the two islets eventually grew together. During this period, the Aztecs were subject to the power of a foreign lord, Tezozomoc, but grew in strength.

Within two years of the death of Tezozomoc, in 1428, the Aztecs raised a conquest-glyph over his capital, showing his temple collapsing in flames. That campaign had been the result of a triple alliance among Tenochtitlan/Tlatelolco, Texcoco and Tlacopan. For the next dozen years, the Aztecs busied themselves in conquering all the remaining rival powers in the Valley of Mexico except Chalco.

In 1440, Montezuma (I) ascended the Aztec throne. His name, which meant "Angry Lord," characterized

them for providing the Spaniards sustenance and comfort. In retribution, the Aztec officials ordered them to immediately send 20 additional maidens and young men to Tenochtitlan, as propitiatory offerings to Huitzilopochtli.

When word of this demand reached Cortés, he was enraged. Along the way to Quiauhutzilani, and throughout their entire time in Mexico, Cortés and his men had been constantly exposed to the fact the Aztecs practiced human sacrifice on a daily basis (see sidebar). Blood-soaked altars and the remains of human bodies were a common sight throughout the journey, and were a constant source of repulsion and anger to the Christians. The demand for 20 more victims to be dragged off to certain death in the Aztec capital inflamed their anger anew.

Cortés, temporarily masking his feelings, calmly ordered the caciques to arrest the tax collectors (to the amazed horror of all the Indians present), and then sent word to Montezuma about why he had done so. The tax collectors, he said, had exceeded their orders and were robbing the

Totonacs, not collecting taxes. This act of bravado and recklessness impressed, as well as frightened, the Totonacs. Cortés, playing a double game, had two of the tax collectors secretly released and sent on to Montezuma as his emissaries.

The Totonacs, in turn frightened by this "escape," were convinced the great Montezuma would send his armies to crush them. Cortés reassured them nothing of the kind was going to happen.

The Aztecs did come, but not the force of warriors the Totonacs feared. Instead, an embassy led by some relatives of Montezuma arrived, demanding to see Cortés — alone. This further impressed the Totonacs about the power and standing the Spaniard had achieved *vis-a-vis* the Aztecs.

Montezuma's men thanked Cortés for releasing the tax collectors, but then made a bitter attack on his original action of arresting them. This is not, they pointed out, how a guest behaves toward his host. Cortés silenced them. Again he requested a meeting with Montezuma, and the envoys left carrying that request.

his reign. He embarked on a building campaign for Tenochtitlan, centered around its main temple. Accordingly, he demanded of his vassals manpower for the project. He also sent emissaries to Chalco, requesting stones from their hills, known to be the largest that could be obtained for sculpture.

The Chalcoans, enemies of long standing, refused. It was their last mistake. Montezuma marched his armies against the city, and when he was done the Aztecs had occupied the place and sacrificed 500 Chalcoans to Huitzilopochtli.

By the time Montezuma died in 1468, the power of the Aztecs stretched from Oaxaca in the northwest, to Compoala in the southeast. Only Tlaxcala still clung to its independence.

Montezuma's successor, Ahuitzotl, continued both the building program in the city and the outward expansion of Aztec power. In addition to the great pyramid in the center of Tenochtitlan, he arranged for construction of aqueducts from Chapultepec to pipe water to the imperial capital.

In 1502, Montezuma II succeeded to the throne. The top priority of his reign was enforcing the collection of tribute from the earlier conquests. He stationed imperial tax collectors and garrisons throughout the empire. They exacted regular and prompt payments, taken in the form of cotton, cacao, feathers, gems, shells, jaguar skins, eagles, dyes, cloth, sandals, corn, silver and gold. It was the overzealousness of these agents that eventually led to Montezuma's downfall, since his resentful vassals would turn to Cortes for tax relief.

Montezuma governed from atop a complex social structure in which he was chief priest, chief justice, and warlord. His word was absolute law, and he had himself declared a demi-god.

Immediately below him were the Caciques (nobility). They enjoyed the privileges of large and comfortable homes, servants, riches, and income from tribute and farm lands outside the city environs. In return, they were expected to attend the emperor at court and participate in his military campaigns. Originally established as positions of merit, the Caciques had become mostly hereditary by the time of Cortes' arrival.

Special status was reserved for Aztec priests. They were the custodians of writing, astronomy, astrology, medicine, and the lore of the tribe. They ran the schools, where they taught their pupils law and government.

Next came the small class of merchants, followed by the ordinary citizens. They lived in small adobe houses, could seldom afford to eat meat, and might be called into military or civil engineering service at a moment's notice. They were forbidden to wear sandals or cotton — which were expensive anyway — and had to content themselves with clothing made of rough agave fiber.

Finally came the slaves, though slavery held no special social stigmas. (In fact, the mother of Itzcoatl, an early emperor whose reign helped establish the Aztecs in central Mexico, was a slave.) Curiously, most slaves were volunteers — a man could sell himself into bondage if his crops failed, or to pay off a debt, with a good hope of buying his freedom later. Some slaves were prisoners of war, but for them servitude was only a temporary reprieve, since they were inevitably sacrificed at the great temple of Huitzilopochtli.

Aztec society demanded strict sobriety and adherence to the law. Little was allowed in the way of deviation. Lying and theft were both punishable by death. Homosexuals were hanged. Adulterers had their heads crushed between two stones. Slanderers and gossips had their lips cut off.



Cingapacinga

While waiting for the envoys to return, Cortés heard that Montezuma's tax collectors, backed by an Aztec garrison, were looting the town of Cingapacinga, some 25 miles away. Cortés led his men, reinforced by 2,000 Cempoalan warriors, to right this wrong. When he arrived at the town, the Spaniards found the Aztecs had already moved on. The accompanying Cempoalans then began to loot what remained of the place.

This brought about a predictable response. The Cingapacingan leaders went to Cortés and began to criticize him. They explained the Cempoalans were their ancient enemies, and were now robbing them while enjoying the Spaniard's apparent protection.

Cortés used the opportunity to impress both sides with his sense of justice. The Cempoalans were assembled, and Cortés, with the Cingapacingans looking on, launched into a stream of invective. He accused his allies of being little more than thieves and liars. He scolded them and humiliated them, and warned he would make them sleep in the fields outside the city. He demanded they return all they had looted.

The next day he forced the two tribes to make a pact of friendship, and further insisted they all swear loyalty to the King of Spain. To underscore the seriousness of his words, he had the few Spaniards who had joined in the looting punished as well. It was a performance that showed the natives Cortés meant what he said.

But Cortés was still not done. On their return to Cempoala, he called together the fat cacique and

his advisors. After again reaffirming his intent to right wrongs, he proclaimed an end to human sacrifice, the worship of false gods, and the foul practice of sodomy. He ordered they destroy their idols, accept baptism and become Christians.

The Indians were mortified, but Cortés insisted. The confrontation grew intense, but finally the Caciques gave in. In tears they tore down their city's altar to Huitzilopochtli, all the while begging the forgiveness of their gods, telling them they were forced to do it.

The temple area was cleansed of the reddish-black gore from countless human sacrifices. A Christian altar was erected, surmounted by a lofty cross. Cortés had some of the newly unemployed Indian priests of the native gods made acolytes and sacristans in the new church. This was a unique role change for those who only days before had been extracting living hearts from sacrificial victims and offering them to the sun.

Plots Afoot

Having thus Christianized the Cempoalans, Cortés turned his energies to other pressing concerns. How his position and actions were to be presented to the court in Spain was foremost on his mind. Velasquez had supporters there, and Cortés was fearful they would portray him as a traitor to the crown. He decided to send a single ship to Spain with an account of his actions. To impress the emperor, he also decided to send a gift of all the gold the expedition had acquired to date.

With "honeyed words" he talked the men out of the gold and other gifts they had obtained since their arrival, arguing that the bigger the gift, the

more likely it was to impress Charles with their prowess.

The ship was sent with orders to sail directly to Spain, bypassing Cuba. Unknown to Cortés, though, the ship stopped at Cuba because one of its officers wanted to check on his estates there. A sailor left the ship and crossed the island to Santiago, where, deep in his cups, he told everyone in earshot of Mexico's riches.

Word quickly reached Velasquez, who was infuriated at being cut out of what he considered his rightful share of the wealth. He began preparations for a second expedition and sent word to Spain on another ship, denouncing Cortés as a rogue and a thief.

Meanwhile, a plot, probably under the leadership of one of the priests, was hatched by some of Velasquez's partisans among Cortés' men to steal a ship and sail for Cuba. There they would denounce the conquistador and thus ingratiate themselves with the governor.

Cortés discovered the conspiracy and ordered the plotters arrested. Supposedly two of them were executed, and the pilot of the ship had his feet cut off. Only the priest, able to claim "ecclesiastical immunity," escaped punishment.

There is some dispute as to whether the punishments were actually carried out, as one of the men recorded as being executed is also found to have signed his name to a document the following year, and the pilot is known to have gone on to Tenochtitlan with Cortés.

Regardless of whether the sentences were carried out, the idea someone might take a ship for his own purposes began to weigh heavily on Cortés' mind. He therefore had the remaining ships beached, dismantled half, and burned the rest. Arguing it was a safety move because the ships were no longer seaworthy (no one believed him), he then stated there was nothing left to do but advance on Tenochtitlan.

As the crackle of flames swept the beach, the men of the expedition realized they had no way to escape. Resigned, they rallied to Cortés and accepted his notion of conquering the Aztec Empire as their only recourse. Dreams of gold and glory also drew them.

Montezuma's gifts, which had been sent to keep the Spanish away, acted instead like golden lures for Cortés and his men. This lust for gold had earlier drawn Spaniards into and across the Caribbean, and the opportunity to enrich themselves and their king on a scale hitherto unknown was irresistible.

So Cortés organized his men for a march on the Aztec capital. It was, all things considered, a pitifully inadequate force for the conquest of an empire. There were 400 Spaniards, 15 horses, 7 cannon, 1,300 Cempoalan warriors, and another 1,000 porters. From an objective viewpoint, it appeared a gnat was about to go after an elephant.

TLAXCALA

The expedition marched north. The region they passed through would one day be famous for *La Vomito* and malaria, but at the time was still a pleasant place, since those diseases had not yet been introduced.

Tlaxcala was their first goal. That kingdom was independent of the Aztecs and the sworn enemy of the power of Tenochtitlan. Several Aztec armies had attempted to subjugate the Tlaxcalans, but all had failed, including one led by Montezuma's own son. It was a place to find real allies.

At the Tlaxcalan border, the expedition encountered a stone wall 15 feet high and 20 feet thick, capped by an 18 inch parapet. The entire wall, about four miles long, was anchored in natural buttresses formed by the craggy hills at each end. Only one opening existed in this formidable obstacle. Located in the center, an entrance had been formed by two semicircular walls that overlapped each other for about 100 feet. This "gate" created a 30 foot passage between the two walls that could be commanded from the inner wall, making it easily defensible.

The Tlaxcalan chief, Xicotencatl the Elder, was not pleased with the coming of the Spanish. In addition to the xenophobia brought on by the constant state of warfare with the Aztecs, word had reached him Cortés had received embassies from Montezuma. Still, Xicotencatl feared to attack the strangers outright. He therefore contrived to have his son, Xicotencatl the Younger, a commander in the Tlaxcalan army, advance on the Spaniards without orders from the Tlaxcalan council. Thus, if the young man were successful, the Tlaxcalans could celebrate a victory. If he failed, the ruling council could disown the attack as the unauthorized act of a mad general.

After crossing the wall unhindered, Cortés and his men were ambushed by a sizable force of Indians. The encounter ended with the Tlaxcalans being driven off, primarily by musketry and crossbow fire.

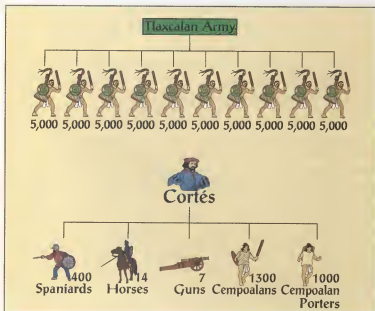
Envoys from the council came to meet Cortés and explain away the offense. They claimed the road to the seat of government was open and the council members awaited the Spaniards there.

The next day Cortés moved forward again and encountered a larger force of 1,000 warriors. "I come in peace!" the conquistador is reported to have called out. The Indians replied by raining darts, stones and arrows upon the column. Again, the Spanish drove them off, this time pursuing the retreating enemy into a narrow canyon glen cut by a stream. As they turned to leave the glen, they discovered they had been led into a well-contrived ambush. (Cortés, in a later message to Charles V, claimed there were 100,000 warriors waiting, but the number was probably closer to a tenth of that.)

When the Spaniards came fully into sight, the Tlaxcalans let out their war cry, began to beat their drums, and closed in.

The glen worked both for and against the Spaniards. The terrain made it difficult to use the artillery and cavalry to full advantage. At the same time, the Tlaxcalans were unable to bring the full weight of their numbers against the Europeans. Similarly, the Indians could not effectively flank the invaders because of the protection offered by the canyon walls.

The Spanish closed ranks and engaged in hand-to-hand combat. One Spaniard, named Moran, was pulled off his horse by the Indians, but was immediately rescued. His horse was killed and dragged off by the Tlaxcalans, who later cut up the carcass and distributed the parts throughout Mexico as proof of their prowess.



Cortés rallied his men and they were able to force the pass. As soon as they were clear, the conquistadors deployed the artillery and cavalry, which between them were able to drive off the attackers. Accepting this change in the situation, Xicotencatl the Younger withdrew from the field in good order.

Cortés again moved forward, sending embassies to the Tlaxcalan general in an effort to make peace. The reply came back: "Leave or Die."

On 15 September 1519, Cortés' expedition encountered the full Tlaxcalan army, numbering 50,000 men. (Cortés claimed it was about 150,000.) Witnesses stated the Indian array covered a plain six miles square (which supports the smaller figure). They were organized into 10 battalions of about 5,000 each, all under the command of Xicotencatl the Younger.

The Tlaxcalans were armed with slings, bows and arrows, javelins, and darts. Their bowmen

were said to be armed in such a way as to make them capable of discharging two or three arrows at a time. In addition, they used javelins with thongs attached, enabling the throwers to recover them for immediate reuse. Their weapons were pointed with bone or obsidian (a hard vitreous rock that takes a razor-sharp edge but is easily blunted), though the spears and arrows sometimes had copper points.

The Tlaxcalans had no swords, but possessed two-handed staffs, about 4 feet long, in which sharp blades of obsidian were transversely inserted. The chronicler Diaz claimed they could fell a horse with a single blow.

Cortés arranged his men to prevent their ranks from being broken by the mass attack he anticipated. But after completing his deployment, rather than awaiting the Tlaxcalan attack, he launched his own. As the Spanish and their allies charged, the Tlaxcalans, in a scene reminiscent of Crecy, fired a volley of arrows and darts that darkened the sun as it whizzed through the air.

Men fell, but Cortés pressed on, determined to bring his artillery and firearms within range. When those weapons were brought to bear, they cut a swath through the enemy ranks.

The Tlaxcalans charged headlong into the fusillade, and broke the Spaniards' ranks. Cortés was unable to bring his line back into reasonable order, but its individual segments continued fighting with fury. They were helped by the fact the Tlaxcalans were not trying to kill their opponents. Instead, the Indians wanted to capture prisoners for a purpose of which the Spaniards were by now well aware — as victims for sacrifice to the gods.

Another deficiency in Tlaxcalan tactics further aided the Spaniards. While the Tlaxcalan warriors demonstrated a good knowledge of how to launch mass attacks, they were apparently unfamiliar with the principle of concentration on a given point. Diaz credits their salvation to that omission. The Tlaxcalans, despite vastly outnumbering Cortés' force, were unable to bring more than a small part of their army against the Spanish lines. The end result was their forces in the rear constantly pressed against those in the front, merely contributing to confusion.

The Spanish infantry, though in disarray, were eventually able to reform the semblance of a line and break the Tlaxcalan charges. Cannon then thundered from the flanks and further disrupted the Indian formations. Then Cortés led the cavalry in a charge. He was driven back, but the horses had given the psychological edge back to the Europeans.

The battle degenerated when two Tlaxcalan commanders withdrew their units in the midst of the fight because charges of cowardice had been shouted against them by Xicotencatl the Younger. Their move reduced the army to half its original size.

After four hours, Xicotencatl the Younger called off the attack and withdrew the still sizable remainder of his army from the field. The Spanish and Cempoalans, fatigued by the fighting, did not pursue.

Cortés spent the evening tending his wounded and burying the Spanish dead where they would not be discovered. He did that both to hide the extent of his losses from the Tlaxcalans and to keep them from discovering for certain the Spanish were mere mortals.

Despite his victory, Cortés was not yet out of danger. The Tlaxcalans were not about to give up. At the urging of Xicotencatl the Younger, their caciques asked their priests a question: "Are the Spanish gods?"

"No," answered the priests, "but they are children of the sun. And they derive their strength from its rays. When the sun withdraws his beams, the Spanish will fail."

Xicotencatl argued this meant that while daylight attacks had not succeeded, a night attack would destroy the Spanish.

The night assault was planned and the enemy approached. Cortés had posted extra sentries (whether he was forewarned or just cautious is not known), and they saw the movement of the Tlaxcalans in the full moonlight. The attack was repulsed.

The Spaniards' detection of their night attack demoralized the Tlaxcalans in a way their defeat in the day battle had not. It appeared to many their gods had abandoned them. How else could the effort have failed? It also increased the superstitious awe of the Spaniards the Indians were developing.

The next day, Cortés again sent embassies to the Tlaxcalan leaders. This time the message was stern rather than diplomatic. The messengers presented the Tlaxcalan council with an arrow and a letter. The meaning was clear — either agree to peace or be destroyed in war.

The caciques chose peace and sent ambassadors to Cortés, informing him their capital was open and he and his men were welcome. Those same ambassadors then went to Xicotencatl the Younger and ordered him to call off the war and supply the Spaniards with food. The young chief disregarded the instructions and imprisoned the messengers. He then sent an embassy of his own to parley with Cortés.

That group immediately became the object of great suspicion on the part of Doña Marina. She noticed its members began drifting away, in twos and threes, after having wandered around the camp and seeing the dispositions of the Spanish and their allies. Warned, Cortés arrested the few still in the camp and accused them of spying. He ordered their hands cut off and sent them back to Xicotencatl that way, with advice not send any more spies.

The discovery of the true nature of his embassy seems to have ended Xicotencatl's desire to resist. He sent another embassy, this time real. The new party arrived at Cortés' camp and offered both peace and food. A few hours later, Xicotencatl arrived with his senior commanders.

At his meeting with Cortés, Xicotencatl was neither compliant nor apologetic. He pointed out he was completely justified in his attacks. Cortés had entered Tlaxcalan lands uninvited, accompanied by the vassals of Montezuma, the Tlaxcalans' sworn enemy. As army commander, he could do no less than what he had done, and he only wished he had been able to do more. Cortés, impressed by the forthrightness of the Indian, offered a reconciliation. While the rapprochement was accepted, Xicotencatl the Younger remained in the forefront of a minority who wanted to distance the tribe from the Spaniards.

Cortés moved his expedition to the Tlaxcalan capital, where they were feted and proclaimed to be great friends. The two parties soon forged an alliance, and the Tlaxcalans became the Spaniards' strongest allies in the coming campaigns.

One issue, however, that of human sacrifice, almost wrecked the new alliance before it began. Cortés wanted to put an end to the practice in Tlaxcala in the same peremptory way he had in Cempoala — by tearing down the idols and forcibly Christianizing the town. One of the Spanish priests restrained Cortés this time, by arguing their purpose was to *expose* the natives to Christianity — *conversion* could be left to those who followed. The priest also pointed out any rash acts might enrage the Tlaxcalans and renew the war. Cortés grudgingly agreed.

The next day an ambassador from Montezuma arrived at Tlaxcala. He stated the Aztec emperor would now be happy to receive the Spaniards at Tenochtitlan, then advised them to move on to Cholula, where a fitting reception was already planned.

Cholula was a city about 20 miles south of Tlaxcala, and 60 miles southeast of Tenochtitlan, lying 6,000 feet above sea level. It was a native religious center, home to a great pyramid dedicated to Huitzilopochtli by the Toltecs. It was the second city of the empire.

Montezuma's invitation, which was delivered with much condescension and disdain toward the Tlaxcalan "barbarians," was greeted with suspicion by them. They argued vehemently with Cortés against the move, claiming it was a trap. But their pleas were to no avail; Cortés, ever the explorer-conquistador, had already made up his mind to go to Cholula.

Cholula

Cortés, his party now swollen by an additional 6,000 Tlaxcalan warriors, arrived outside Cholula a few days later. The Cholulan leadership asked him

Aztec Human Sacrifice: Propitiation or Protein?

The ceremonial execution of victims as an offering to the gods — human sacrifice — is a tradition with a long history. The Old Testament records that Yahweh demanded Abraham sacrifice his only son, Isaac, as a guilt offering. Various other gods of antiquity often demanded the execution of prisoners taken from opposing tribes and nations. The sacrificial offering of beautiful young maidens to various blood-thirsty deities has been a leitmotif in numerous cultures (and Hollywood's movies about them).

The Aztecs did not introduce human sacrifice to Mexico, nor were they its only practitioners there, but they did carry it out on an unprecedented scale.

The Aztecs believed human blood fueled the cosmos. Without it, Huitzilopochtli, both sun god and war god, would go thirsty, causing the sun not to rise. To ensure divine favor, then, persons pierced their own bodies, and the priests performed sacrifices.

The ritual was simple enough. The victim, stripped naked, was painted a ghostly white and crowned with feathers. Were he a special victim for an "honorable sacrifice" — for example, the victor in an athletic contest — he would be feted first. A great banquet would be held in his honor and he would then be taken to the foot of the steep pyramid temple in a festive cortège. He would ascend the steps to the top, accompanied by his chanting killers-to-be, whom he addressed as "father."

While four priests held the victim stretched over an altar, a fifth used an obsidian dagger to rip open his chest, and would then tear out the still-beating heart. Sometimes the organ was cast into a sacred receptacle of the god; other times it was smashed against his statue. Either way, another priest would decapitate the victim's body, and skewer the head on a skull rack.

The corpse was then kicked back down the stairs, where other priests would remove the arms and legs. The torso was fed to snakes, jaguars and other wild animals kept in pens beneath the temple.

Preferred victims were those captured in war. Except for skipping the banquet and cortège, the ritual, and their fate, was the same.

The sheer number of these sacrifices — as recorded by the Aztecs themselves, and not later Christian chroniclers wanting to enhance the Indians' barbarity — is beyond imagination. When Montezuma I's ambitious son Ahuitzotl came to the throne in 1468, he inaugurated his reign by ordering the grand temple of Huitzilopochtli in the center of Tenochtitlan be rebuilt on a grander scale and rededicated. Some 20,000 captives were marched up those temple steps to the stone altar, where four days and nights of non-stop sacrifice were needed to process them all.

Since prisoners of war provided a good source of victims, the battle tactics of the Aztecs and other tribes of Mexico emphasized wounding and capture. (Cortés himself only avoided death on at least one occasion because the Aztecs were more intent on taking him

alive for sacrifice than on immediately eliminating their nemesis.) It was not unusual for the towns and kingdoms under the control of the Aztecs to have part of their tribute exacted by sending some set number of victims to Tenochtitlan.

Human sacrifice in Aztec society differed from that in many other cultures in that the ceremonies were conducted daily and were not limited to religious festivals. The religious festivals seem only to have been differentiated in importance by the number of sacrifices offered at each.

Yet another Aztec peculiarity lay in the fact the severed arms and legs of the victims were prepared in a stew and eaten. The comestibles from the daily sacrifices were reserved for the nobility and military leaders, but those from the many festivals were distributed to all the populace. The only stricture involved was that no one was allowed to eat the flesh of a relative.

Both the quantity of individuals sacrificed and the cannibalism that followed have led some to wonder if there wasn't an additional, entirely secular, motivation behind the practice. It has been pointed out, for instance, that central Mexico was significantly lacking in animal protein sources prior to the Europeans' introduction of Old World livestock. Though there was certainly some game in pre-Cortés Mexico — mostly deer and hare — there were no large herd animals.

Further evidence of this is shown in that the many gifts of food the Indians made to Cortés (and which were assiduously recorded by Bernal Díaz) never included any animal protein. Other records of the period indicate the only animals the Aztecs domesticated were the dog and guinea pig (the latter species probably was kept solely for food purposes). While the flanking seas offered rich harvests of fish, getting them from the coasts to Tenochtitlan involved immense difficulty, not the least of which lay in the fact the fastest and strongest pack animal available to the Aztecs was man. The Mexican plateau, then, despite its beauty and the richness of its lakes, almost certainly could not have supported its resident population's protein needs.

The result of this protein deficiency, it has been argued, was human sacrifice on a grand scale, wherein both the gods and the dietary needs of their adherents were bloodily satisfied. Proponents of this interpretation point to the Incas, where a similar religion and worship of the sun did not result in human sacrifice, the reason supposedly being that the Incas' llamas — the only true American pack animal — also served as a food source, making any search for alternatives unnecessary.

This debate, of course, will continue until someone either invents a time machine or discovers an Aztec glyph titled "Why We Sacrifice Humans." Still, even with final proof lacking, the protein deficiency hypothesis offers a rational explanation for what otherwise seems unbelievable barbarity.

to leave his new allies outside their city, arguing they could provide neither sufficient food or lodging for them. They also pointed out how uneasy they would feel at the presence of so large a force of their traditional enemy in their midst.

Cortés agreed to the request and had the Tlaxcalans quartered in nearby fields. For their part, the Tlaxcalans grumbled and warned Cortés again of the treachery of those who served Montezuma.

At first there seemed little to worry about; the Cholulans treated Cortés and his party well. They were quartered and fed, and shown a high degree of cordiality. But after he had been in the place a few days, more ambassadors arrived from Montezuma. They told the conquistador they had been sent to guide him on to Tenochtitlan. Upon their arrival, the Cholulans suddenly became distant. They no longer acted open and friendly, and took on an air of unspoken hostility.

It was Doña Marina who again brought Cortés confirmation of what he had begun suspecting. She had become friendly with the wife of one of the Cholulan caciques, and that woman had urged the translator to pack her things and come along with the other noblewomen. They were all leaving town, as a plan was afoot. As Doña Marina feigned packing, the chief's wife explained the orders that had just been received from Montezuma: the Spaniards and their allies were to be ambushed as they began to leave Cholula.

Cortés dealt with the news in a subtle way. First he summoned the Cholulan caciques and told them he would leave the next day, asking them to gather the necessary porters. They, of course, immediately agreed.

Later the same day, he called in the Aztec ambassadors. Cortés told them he had uncovered a plot by the Cholulans to ambush him. This ambush, the Cholulans had in turn claimed to him, was on the orders of Montezuma. Was that true? The Aztec caciques, caught unaware, denied their emperor's involvement.

Cortés feigned relief and told them he had thought all along Montezuma was blameless. But, he explained, the Cholulans needed to be dealt a harsh lesson because of their duplicity toward him and their slandering of the emperor's honor. Cortés said he would see they were punished for their treason. He then ordered a heavy escort put on the ambassadors, and sent them back to Montezuma, not allowing them to speak to any Cholulans along the way.

The next morning a large number of Cholulan porters gathered in the town's market square along with their principal caciques. Cortés went out to them and denounced them for their treachery. At that, the Spaniards began to massacre the porters and accompanying chiefs. The noise drew the nearby Cholulan warriors who had been waiting in ambush, and soon a full scale battle ensued.

Meanwhile, outside the city, the Tlaxcalans heard the din of combat, so they entered the city and fell upon the Cholulans.

During the battle the Spanish fought their way up the 120 steps of the great pyramid. Upon reaching the temple's summit, they set fire to the wooden structures surrounding the altar.

The fight ended a short time later, with some 3,000-6,000 Cholulans dead. The city belonged to Cortés, and the scene of human sacrifice had been destroyed.

Just as the combat was ending, new envoys arrived from Montezuma, denying any imperial role in the plot. Cortés, though he knew the truth of the matter, accepted their word with mock gladness. It became one of his consistent policies to turn a public blind eye to Montezuma's treacheries and to maintain good (surface) relations with the emperor.

At the end of the battle, the Cempoalans with Cortés, who had been growing increasingly uneasy as the expedition drew nearer Tenochtitlan, asked permission to return to their home. They feared they would eventually become the prime target of any retribution by Montezuma. Cortés, who now had confidence in his Tlaxcalan allies, granted their request.

Cortés and his men left Cholula, accompanied by their Tlaxcalan auxiliaries and the Aztec ambassadors.

Soon the Tlaxcalans were warning of another possible ambush. Their scouts reported the most direct route to Tenochtitlan had been blocked. The alternate road led through narrow mountain passes, where Montezuma's men might be waiting to fall upon the travelers.

When the column reached the crossroads, they found the direct road to Tenochtitlan obstructed with large stones and tree trunks, just as the Tlaxcalans had warned. Cortés demanded an explanation from the Aztec envoys. They claimed Montezuma had ordered it because it was impractical for horses and cannon to the use that road. The emperor didn't want Cortés to make the mistake of trying to use a route that was impassable to a portion of his force. Cortés replied by asking if the blocked road was indeed the most direct way to the capital. The envoys admitted it was.

"If it is the most direct route, that it is the one we shall use," the Captain General said, and ordered the obstructions cleared away. This seemed to impress the Tlaxcalans, but aggravated the envoys.

As the march toward Tenochtitlan began, the column ascended the pass lying between the two volcanos guarding the valley. Popocatepetl is a majestic mountain rising 17,852 feet above sea level, making it 2,000 feet higher than any European mountain the Spaniards had ever seen. They climbed into the pass and on reaching its zenith beheld the Valley of Mexico for the first time. It

was an amazing sight to them, fertile and verdant. A city on a lake glistened in the distance.

Tenochtitlan

Tenochtitlan was like no other city they had ever seen. Built on marshland in the middle of a lake, it was bigger by far than their own capital of Seville. They could see the arcaded marketplace. In the center soared the gleaming lime-washed turrets of the temple complex. A section of the royal palaces faced it, and beyond that spread 60,000 flat-roofed adobe dwellings, neatly arranged along a network of well-kept streets and canals. Three long causeways linked the city to the valley floor. Further toward the horizon shimmered a half-dozen other cities.

As they entered the valley, they were met by still more ambassadors. These brought with them rich gifts of gold and Quetzal feathers, and the offer of a bribe to leave. Four loads of gold were promised for Cortés, and one for each of his captains. Montezuma also offered to pay a yearly tribute to Charles V. All he asked the Spanish to do was turn back. Cortés thanked the ambassadors but said he had come to meet Montezuma and pressed on.

At the first causeway they were met by another party of officials sent by Montezuma. This was no ordinary embassy, however, for at its head was Cacama, the ruler of Texcoco and, next to the emperor himself, one of the most powerful men in the realm. Cacama was already angry because Montezuma had rejected his advice to fight, saying that the end of the Aztecs was foreordained.

These newest ambassadors approached, touching the earth with their right hands and then raising them to their heads in the traditional gesture of respect. After another offering of gifts, they escorted Cortés and his party across the lake causeways and into the precincts of the city of Tenochtitlan. It was 8 November 1519.

To enter the city proper they had to cross a wooden drawbridge — a fact that disturbed many in the expedition. The raising of that single drawbridge could cut any escape. This was pointed out to Cortés, but he ignored the warning.

They reached a large square. From its other side came a procession bearing a litter upon which Montezuma rode in high state. The procession stopped before Cortés, and the bearers lowered the litter. As Montezuma stepped off, his retainers carpeted the road with their mantles, so the emperor's gem-encrusted sandals never touched the bare earth. Montezuma presented Cortés with the feathered robe of Quetzalcoatl. "We have been the custodians of your kingdom," he said. "We knew you would come some day to reclaim it."

Montezuma was about 40 years old at the time. He had an aristocratic and slim figure, straight black hair and a small, thin beard.

It is interesting to speculate what must have gone through the two leaders' minds as they beheld each other for the first time. One was self-confident and felt assured he was destined to be a great conqueror. The other, who had earlier declared himself semi-divine, was not yet certain whether he looked on a returned god or a mere mortal come to despoil.

Cortés, resplendent in the robe that marked him as a god, gave Montezuma a necklace of colored crystal. He then reached out to embrace the emperor, but was quickly restrained by caciques, who — not convinced of the Spaniard's divinity — objected to this bit of *lese majesty*.

Montezuma had Cortés and his men quartered in the palace of his father. That residence was large enough to provide quarters for all of the 400 Europeans and 7,000 Indians in the expedition.

Capture of Montezuma

A week passed. A cordial relationship developed between Cortés and Montezuma, at times even seeming friendly. Still, anxiety filled Cortés and his men. They were still in alien territory and badly outnumbered. A sudden change in Montezuma's attitude could place them beneath the knife blades of the priests of Huitzilopochtli. The daily sacrifice of human victims was a strong reminder of the fate that might be awaiting them. Some urged Cortés to take Montezuma hostage, as a way to protect themselves. He agreed, but needed a pretext.

That pretext was provided by the death in combat of one of the men Cortés had left behind to garrison Vera Cruz. That fight had been little more



Montezuma and Cortés meet.

than a random skirmish, but when the soldier's head arrived as a trophy for Montezuma, Cortés took the opportunity to accuse the emperor of complicity in yet another plot. The conquistador had the ruler moved from his own palace to the one where the Spaniards were quartered, putting out a story that the move was only temporary, to convince Charles V of Montezuma's innocence.

His position thus more secure, Cortés pressured Montezuma to swear fealty to Charles V, and the Indian agreed. The Aztec summoned his nobles to the palace and reminded them he was their overlord and they had always known they would have to return power to the gods someday. Then he swore loyalty to Charles V, surrendering his possessions and the treasure of his empire to Spain.

Cortés, mindful of the legal formalities, made sure the royal notaries were present and that they properly recorded the pronouncement of Montezuma. Along with their certification, he sent a letter to Charles, stating, with characteristic immodesty, "I have given to you more kingdoms than your father left you towns."

Cortés asked after the source of all the gold he had seen since coming to Mexico. He sent out expeditions, including one led by Francisco Pizarro, to the areas identified by Montezuma, to secure those places and build new towns on them. Then Montezuma turned over the gold in his father's sealed room, the treasure house of Mexico.

Here was what the men had come for, and they were eager to possess it. Cortés began to divide the gold. First he set apart the "Royal Fifth" for the distant Charles, then the fifth due him as Captain General. Another fifth he ordered set aside to pay the cost of the expedition. Then he ordered still more set aside for the chaplain, the crossbowmen, the men who had lost horses, the men in Vera Cruz, etc. In the end, there was so little left to divide among the common soldiers, many refused their small portions in contempt. Complaints against Cortés grew, but he ignored them, promising the men this was only the beginning and what was to come would satisfy their wildest dreams.

Having thus secured gold and glory, Cortés next decided to settle the matters of God. Throughout his captivity, Montezuma had continued to attend the daily human sacrifices and feast on human flesh. His favorite dish, chronicler Diaz states, was "young boy." This appalled the Spaniards.

Cortés told Montezuma the gods of the Aztecs had to change. They were false gods, and must be done away with and the Aztecs all must become Christians. Montezuma refused to even consider such a sweeping idea, but did make some concessions. He told his cooks to stop serving him young boy, and he forced the priests to allow Cortés to place a statue of the Madonna, along with a cross, atop the temple of Huitzilopochtli.

The priests, feeling their power threatened, resisted. Huitzilopochtli, they claimed, was not pleased with sharing his temple. They demanded to leave Tenochtitlan, carrying the image of the god before them, and thus signalling to all the abandonment and displeasure of heaven. While the people had been willing to tolerate the imprisonment of their emperor and the surrender of their national wealth, the departure of their god was unacceptable.

Hostility grew toward the Spanish, and the men in the expedition sensed a change in the atmosphere. The coldness of the people and air of hatred increased. The priests contributed by egging on the people, claiming the gods wanted the invaders dead.

Montezuma warned Cortés the Spanish must leave. Mortal danger faced them otherwise, and the emperor was no longer sure of his ability to contain the explosive situation. This warning came as a confirmation to the growing sense of peril the Spanish already felt, and with it they went, psychologically, from being masters of the empire to men desperately looking for any way out of a deadly trap.

Cortés, wanting to salvage what he could, agreed with Montezuma the time had come for his departure. There were, however, two final things the conquistador needed from the emperor. First, Aztec carpenters would be needed at Vera Cruz to help build new ships, since the Spaniards no longer had any that were seaworthy. Montezuma readily agreed and ordered carpenters to assist the Spanish shipwrights.

Second, Cortés demanded Montezuma himself must come to Spain with him, so that Charles V might see him. Again Montezuma agreed, though this time not as happily. It was, he admitted, perhaps the only way to avoid bloodshed.

A decree was put out announcing the gods had ordered the Spaniards be left to depart city the gods unhindered. For the time being, though the gods might still be appeased with sacrifices, they should no longer be human ones.

While the new ships were being built on the beach at Vera Cruz, the soldiers in Tenochtitlan grew ever more apprehensive. They doubled the guard on Montezuma, who they rightly perceived as their only shield.

Navarez

Delivery from the increasing tension arrived unexpectedly. Word came from the coast that first one ship, then a great fleet, had arrived at Vera Cruz on 23 April. Cortés' initial thought was they must be reinforcements, but he was unsure, and so said nothing to the Aztecs.

But the same news had already reached Montezuma, who in turn said nothing about it to Cortés. When the Captain General next visited the emperor, he found the Indian looking cheerful.

Cortés inquired into the change of mood, and Montezuma happily displayed the painted cloth pictures of the new fleet that his messengers had brought. His joy, he explained, was that the appearance of this fleet meant Cortés could depart immediately without having to wait to build his own new ships. Cortés examined the pictures but remained noncommittal.

Then Cortés received additional word from Vera Cruz. The fleet, under the command of Panfilo de Navarez, was not one of deliverance, but one sent by Velasquez to arrest Cortés. There were 18 ships, 20 cannon, 2 master gunners, 80 horsemen, 90 crossbowmen, 70 musketeers, and another 1,140 infantry. Their arrival was proof of Velasquez's anger; the expedition's size showed its extent.

Soon after landing, Navarez was greeted by the inevitable emissaries from Montezuma. The Spaniard denounced Cortés as a bandit and entered into secret negotiations with the Aztec emperor.

Three soldiers with Cortés in Tenochtitlan, former followers of Velasquez, abandoned the city and made their way to their old leader, providing him with another account of Cortés' many transgressions. In addition, they described the weakness of the garrison at Vera Cruz and the growing tension in Tenochtitlan between Cortés and the caciques. Buoyed by their report to the point of over-confidence, Navarez ordered a gallows built on a hill near the landing site. From it, he claimed, he would soon hang Cortés.

Navarez then sent a messenger to Vera Cruz warning them of their imminent destruction. This failed to impress the garrison; they took the messengers captive, trussed them up in net hammocks, and sent them on to Cortés.

Leaving behind a force to watch Montezuma, Cortés led 266 men on a rapid march to meet Navarez's expedition while it was still on the coast. Enroute, Cortés sent word ahead offering to negotiate with the newcomer, but his offer was rebuffed. Battle for control of the new territories seemed the only remaining alternative.

Arriving near the site of Navarez's encampment, Cortés organized a night attack against the much larger force. In the darkness and confusion, Cortés' men managed to gain control over the bulk of the camp, but Navarez retreated to a nearby tower. Cortés and his men rushed the tower before a new defense could solidify there. Navarez was wounded in the ensuing hand-to-hand struggle and taken prisoner. With that the resistance ended.

The next morning nearly all of Navarez's men agreed to throw in with Cortés. In fact, they had no real alternative. Besides, Cortés generously offered all of them a share in the treasure of the Aztecs.

But before he could take time to savor this increase in his forces, word came of a massacre at Tenochtitlan.

Massacre at Tenochtitlan

The feast of Huitzilopochtli was extremely important to the Aztecs, and they petitioned Pedro Alvarado, the officer Cortés had left in charge at Tenochtitlan, for permission to celebrate it. Alvarado agreed.

That celebration began in the normal manner, and the age-old rituals were followed, except the newly proscribed human sacrifices were omitted. Chanting and dancing began, and song roared through the great square in front of the pyramid. When the ceremonial dance, involving a great throng of priests and warriors, reached a crescendo, Spanish soldiers — perhaps finally frightened beyond endurance by the savage spectacle before them — fell upon the celebrants without warning.

First they attacked the ceremonial drummer, cutting off his hands with a sword stroke. Then they attacked the dancers, slashing and stabbing at will. The Spanish garrison, their fears raised to a frenzy, massacred every Indian within reach.

The stunned Aztecs soon recovered from their own shock and raised the war cry. Slapping their lips with their palms, they shouted aloft their rage and grief and counterattacked. Warriors swarmed from the nearby streets and canals into the plaza. As they poured in, they loosed spears and barbed javelins, tridents and darts, into the ranks of the Spanish.

The Spaniards responded with gunfire and lances, and fought their way back to the fortified palace. Montezuma attempted to call off the Aztecs, but none listened — his credibility with his own people finally had been destroyed. The Aztec warriors called their emperor "a fool." They declared him deposed and elected another ruler, Montezuma's brother, Cuitlahuac.

While Cortés rushed back toward Tenochtitlan with 70 horsemen and 500 infantry, the siege of the palace continued. The Spanish garrison attacked anyone who approached. For their part, the Aztecs dredged around the palace island, widening and deepening the channel to prevent the Spaniards' escape. They also built barriers and ramparts in the streets. Human sacrifices began again from atop the great pyramid, in sight of the Spanish, who were shouted to that their turn would come soon.

Besieged

Cortés marched through a suddenly empty countryside. The road and towns along its path were deserted. The new troops grumbled at the lack of treasure and the scarcity of food. Cortés, trying to calm them, assured them their time at Tenochtitlan would be filled with gold and feathered cloaks.

But Tenochtitlan, too, was ominously quiet. Cortés made a serious mistake by leading his troops through the now-empty streets and into the palace. When Montezuma came out to greet him,

the conquistador coldly turned away, angered at the silence of the city.

Alvarado gave a series of explanations, perhaps too many, as to what had caused the revolt. The Aztecs had attacked because they wanted to free Montezuma. The Aztecs had attacked because they believed their gods had ordered them to punish the Spanish for putting up the cross and Madonna. The Aztecs had attacked because the Spanish were still here even though the ships had arrived. The Aztecs had attacked because it would be wise to kill the garrison while the Spanish forces were split. Having been warned, he, Alvarado, had allowed the Aztecs to hold the feast they were going to use as a cover for their attack, and then he had struck them first.

Cortés received his subordinate's explanations with contempt. In a rage he called them "all wrong!" A "great mistake" had been made, and Cortés ruefully said "He wished that Montezuma had escaped."

Two Aztec couriers from Montezuma approached Cortés and said their master wanted to speak with the conquistador. The timing was wrong, though, and Cortés snarled at the request: "That dog! He won't hold a market or order food brought to us!" But the Spanish captains tried to appease Cortés' anger, and urged him to make up with the Indian. Calmed, Cortés turned to the couriers again and told them he would be happy to see Montezuma when the emperor thought to order the market reopened and the siege lifted.

The drastic change in the situation was finally brought home when a few moments later a wounded soldier entered the room. He was a scout who had just made his way from a town across the lake to report the Aztecs were massing there in preparation for an all-out attack. Cortés reacted by ordering a force of 400 men into the square to pacify the Aztecs with a show of force.

The detachment had reached as far as the center of the square when they were ambushed by waiting warriors. They had to fight their way back to the palace step by step. Cortés now knew he must contrive some new stratagem for escape, while the Aztecs outside continued to seek a way to his own life.

The palace in which the Europeans were besieged was made of a vast and irregular pile of stone only one floor in height. In the center, a second partial story had been added, consisting of a suite of royal apartments. A large open area stretched around the building walls, and was in turn encompassed by a stone wall. That outer wall was supported by towers and bulwarks at irregular intervals. The Spanish had placed their cannon on its parapet, and had made apertures for the use of the musketeers.

It was the original Mexican stand off. By day the soldiers sallied out to engage the Aztecs in the network of streets and canals surrounding the

palace. But the wooden bridges had been removed, and they could not escape that way. Nearby houses, from which the Indians had been raining missiles on the Spaniards, were put to the torch, and the fortifications in and around the palace were enhanced.

At night the city belonged to the Aztecs, who came out to tear down whatever works the soldiers had labored to build that day. The Aztecs also made good use of fire by burning away an entire side of the Spaniards' stronghold.

Also at night, from the altar platforms atop the pyramidal temples of the city, there came infernal sounds and taunts accentuated by the glows of the many watch fires. The Aztecs yelled that they would soon stuff themselves on the legs and arms of the Spanish, while their torsos would be fed to the wild beasts and snakes in the pits below.

With the coming of dawn, the Indians would remove the temporary bridges they had put up the previous evening to allow their own movement, and fall back to a safe distance, while masses of warriors kept watch for some opening to reveal itself.

Cortés ordered the construction of three mobile towers with which he planned to bridge the surrounding canals. These wooden structures would each provide cover for 20 men with muskets, and with them in the lead the expedition could, he hoped, force its way across the city.

As the towers were being built, Cortés asked for a truce to allow him and his men to leave Mexico. The request was rejected. Cortés then sent his chaplains to Montezuma, entreating the emperor to ask for a truce.

"What more does he want from me?" Montezuma asked in anguish and anger. Cortés was nothing but "a maker of false promises and a weaver of lies." It made no difference anyway, he told the chaplains; the people had deposed him and elected Cuittlahuac as the new emperor. That cacique, he warned, had sworn no Spaniard would leave Tenochtitlan alive.

The priests begged him to try. Reluctantly, he consented to speak to the people from the roof, though he doubted it would do any good.

Montezuma appeared on the roof of the fortress, surrounded by Spanish soldiers who were ordered to shield him. The nearest Aztecs soon recognized him, and the fighting and commotion in the streets stopped. Three nobles advanced and called up to him. They said they had come to deliver him from captivity. They said the gods had demanded no Spaniard be allowed to leave. The war would end only when the last of Cortés' men had been sacrificed to Huitzilopotchli.

Then stones and javelins flew toward the men on the roof. The guard had relaxed during the Indians' exchange, and they failed to protect Montezuma as they dove for cover. Three stones struck the Aztec, one each on the arm, leg and



The Spaniards break out of the palace and capture the great teocalli.

head. Silently he fell to the ground, his pleas for a truce still unspoken. The guards quickly carried him to his apartments, where it was hoped he would recover. It was 25 June 1520.

The Aztecs outside took up positions atop the pyramid nearest the Spaniards' fortress and began launching missiles upon it in earnest. If left unhindered, they would eventually be able to wreck the palace. Realizing that, Cortés determined to seize the pyramid.

The musketeers were sent first, and crawled in broken formation up the steep temple steps, firing volleys into the ranks of the 4,000 Aztecs guarding the place. Behind came the Spanish crossbowmen, swordsmen and dismounted lancers.

The Aztecs struck back from the summit, rolling heavy logs down on the climbing soldiers, crushing some. After being thrown back three times, the Spanish finally fought their way to the top, where they sought the cross and statue of the Virgin. The Aztecs, of course, had removed both. Angered, the Spanish set fire to the tower. With those flames providing a backdrop to his words, Cortés gave a speech, calling upon the Indians to accept the totality of their defeat. Those nearby shouted back their defiance. They were willing, they said, to accept the death of 25,000 Aztecs for every single Spaniard, if that's what it took to rid their land of him and his men.

Shortly after Cortés returned from the sally, Montezuma died without warning. The conquistador allowed the emperor's retainers to carry the body back to his own people. With great sorrow and many tears, they burned the body on a huge pyre.

Cortés sent out word that Cuauhtemoc, Montezuma's cousin and a prisoner of the Spaniards, was now the true emperor of the Aztecs. But the

warriors, no longer restrained by the presence of Montezuma, renewed their assaults with increased violence.

Inside the compound, Cortés' men were soon reduced to drinking brackish water, and the battle became continuous. It had been 23 days since the massacre had started the crisis, 7 days since Cortés had returned from the coast, and the situation seemed to be growing more desperate each minute. On 30 June, Cortés resolved to break out or die trying.

Night of Sorrow

Early that day, Cortés ordered the gold distributed to packs on the horses, conscientiously saving as much of the Royal Fifth as possible. Then he called in the notaries and certified to them no more could be taken, and told the men to take any of the remaining gold they wanted for themselves. Some, overcome by greed, took more of the heavy metal than was prudent. Others, like Diaz, grabbed a trinket or two, but balanced the lure of the treasure against their will to survive.

Under Cortés' direction, they quickly built a portable bridge to cross the canals (the planned towers had never been completed). Then they waited for midnight. It came, wet and foggy. Visibility was further obscured by a fine drizzle. They made their way to the canal, with the weather serving as a cover and their horses' hooves wrapped in cloth to muffle the sound.

They reached the first canal undetected, set up the bridge and crossed onto the Tacopan causeway. But an old woman was drawing water and saw the moving troops. She let out a cry. Shouts and whistles answered from the darkness, and thousands of warriors seemed to materialize in seconds. Some attacked from canoes in the canals; others swarmed onto the causeway and mercilessly knifed the booty laden Spaniards.

Cortés, standing amid the chaos on the causeway, called for the rest of the men to hurry and cross the bridge. But he could only watch in anguish as the Aztecs continued to press in on the shrinking detachment on the other side.

The scene was complete carnage. The causeway filled with dead Indians, Spaniards, and horses. Irreplaceable crossbows and muskets fell into the water and were lost along with their owners. The battle quickly degenerated into a contest between Toledo steel and Mexican obsidian, as hand-to-hand fighting ensued all along the column. Some of the Europeans who fell were not killed outright, but were dragged by mobs of Indians toward the temples for sacrifice.

In frustration and rage, Cortés tried to recross the bridge to join the last defenders on the other side. But he was restrained by the men with him until the bridge collapsed under the weight of the men and horses struggling upon it. Those on the other side were thus trapped and lost.

Cortés and his diminished column pressed on until they finally had gained solid ground, where they regrouped at the foot of a large tree. The cost of the breakout had been fearful; Cortés had lost 150 soldiers either killed in action or sacrificed, 2,000 Tlaxcalans, and 45 of the irreplaceable horses. Hundreds more men were missing. Every one of the Spaniards was wounded. Of the 20-odd horses

that had survived, not one was fit to run.

As he left the city, Cortés, worn by fury, exhaustion and grief, paused for a moment and wept. But the "night of sorrow" was not over yet.

Harried by taunting warriors, Cortés and his men struggled to get out of the city environs. An Aztec army confronted them on an open plain near Otumba. War cries rang out. Guns and pow-

Spanish (and Allied) Order of Battle — 20 May 1521

Cortés commanded 793 (1,110) Spanish soldiers: 84 horsemen, 650 infantrymen, 194 crossbowmen and musketeers, and 182 sailors. He also had 13 gunboats on the lake, bearing a "large" (undetermined) number of cannon of various sizes. This command was divided into three operational groups.

Pedro de Alvarado commanded the first group, with Jorge de Alvarado, Gutierrez de Badajoz and Andres de Monjaraz as his lieutenants. Pedro personally led a troop of 30 horsemen, and each of the lieutenants commanded a force of 50 foot and 6 musketeers and/or crossbowmen. This group's primary objective was the town of Tacopan. They were accompanied by 8,000 Tlaxcalans.

Cristobal de Olid commanded the second group while personally leading 30 horsemen. Andres de Tapia, Francisco Verdugo and Francisco de Lugo were his lieutenants, and each led about 60 foot and 6 crossbowmen and/or musketeers. This group was charged with the taking of Coyoacan, and they, too, were accompanied by 8,000 Tlaxcalans.

Gonzalo de Sandoval was the captain of the third, and smallest, group. He had only 24 horsemen, 150 foot, and 14 crossbowmen and musketeers to split evenly between his two lieutenants, Luis Marin and Pedro de Ircio. Sandoval was to attack Iztapalapa, but only after the first two groups' objectives had been secured. Sandoval was also accompanied by uncounted thousands of native-American troops from various cities, but none of them were well-trained or disciplined.

The 13 launches carried the majority of cannon and musketeers, and had been designed with idea of operating as floating gun platforms. They were completely successful in that respect, and Cortés himself first captained the naval force into battle.

Most of the Spanish soldiers were by this point wearing the "armor" of choice of the region — quilted cotton — with only a very few of the foot soldiers using the hot steel breastplates. Most also carried a wooden or metal shield of some kind, usually of a better make than the local models. The Spanish cavalymen were more likely to have heavier body armor than the infantry, for the obvious reason their horses gave them a better means to carry the extra weight.

The horses also afforded their riders the use of a lance, which the Spanish used with terrible effect. By the time of the siege, however, Cortés' cavalry had learned to operate more as a psychological weapon than anything

else. That is, even though the Aztecs were no longer supernaturally frightened of the horses (several had already been captured and sacrificed to Huitzilopochtli, thus bringing the animals within the Indians' cosmology), they had failed to evolve any tactic to counter cavalry charges. The Aztecs usually broke when faced with charging cavalry, even before contact was made.

The muskets and crossbows the Spanish had with them proved best for sniping at Aztec leaders and opening lines of advance through their ranks. The missile weapons would be used in a concentrated volley against some selected spot in the defenders' lines. The Aztecs would clear out of that area, leaving an opening for the Spanish to charge in.

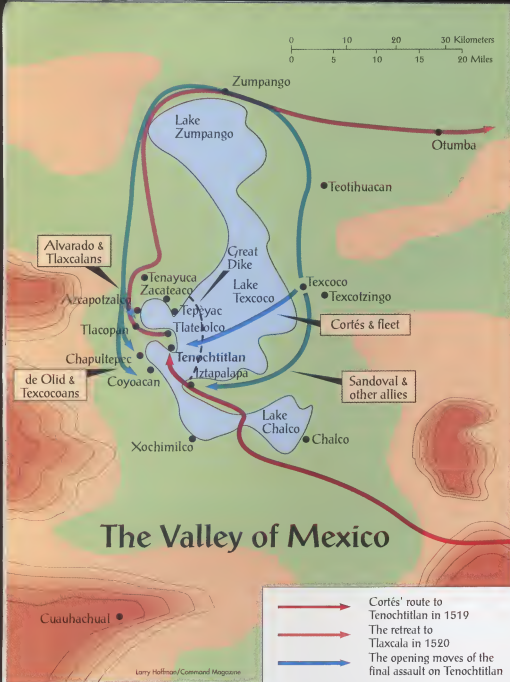
The greatest advantage the Spaniards had, however, were the fine Castilian steel swords each man carried. These swords never began a battle as sharp as the *Macanas* opposing them, but they kept a usable edge far longer. They also had a thrusting tip, which extended the reach of the average Spanish soldier beyond that of the Aztecs he faced. That meant the Europeans could stab at their opponents' vitals while only exposing their own arms.

Having this more powerful and flexible weapon had led the Spaniards to develop superior fighting techniques for its use. In battleline, the Aztec warriors usually were cut down by their Spanish opponents like neophyte fencers pitted against Olympic champions.

The Spanish were accompanied by somewhere between 100,000 to 150,000 native-American troops, all organized along Aztec lines. Of those, only about 32,000 — the warriors from Texcoco and Tlaxcala — were really any good. The rest were little better than javelin-armed day laborers.

In general, the force fielded by Cortés on 20 May 1521 could be summed up as a bunch of local toughs centered around a nucleus of battle-hardened Spanish veterans. Their leaders were mostly of an excellent calibre, and showed great initiative in surmounting the tactical problems facing them. Whether a Spanish regular had first been seasoned a month before at Chimaluacan, a year earlier during the Night of Terror, or years before that fighting Moors in Granada or the French in Savoy, he was a man who knew the battlefield and its ways intimately. They were also men who held a vision of immense wealth and honors awaiting them if they endured all and took the most beautiful city on earth for their own.

— L. Dean Webb



der were long spent; only steel remained. Though suffering from a head wound, Cortés led a charge directly toward the Aztecs' leader (who had made himself conspicuous with an enormous gold banner). After a brief flurry of flashing steel, the cacique was killed, whereupon his warriors fled.

In the unexpected lull Cortés and the tattered remnant of the garrison made their way to the stronghold of their Tlaxcalan allies. It was 1 July 1520.

Regrouping

The Spanish spent 22 days healing their wounds and rebuilding their forces at Tlaxcala. The Tlaxcalans, despite the fact Cortés had been defeated and driven from Tenochtitlan, remained fiercely loyal to his cause.

Cortés cast about for more reinforcements and sent a message to the garrison at Vera Cruz asking for men and arms — *but not* mentioning his expulsion from the Aztec capital. Word of the fiasco must have reached the coast, however, because only seven thin, sickly, and ill-equipped sailors responded to his call. Then some of the men who had come in with Navarez demanded leave to go home. But they withdrew that request when the men of Cortés' original band declared they would stay with him.

Cortés marched to Tepeaca, but found the natives there defiant. Then, in another fit of anger and frustration, Cortés called forth the royal notaries and decreed in their presence that the Aztecs who had revolted were condemned to slavery. This simple but far-reaching act eventually provided the legal basis for the mass enslavement of natives that would occur in the years and decades to come.

The Tepeacans were easily routed in a battle in a cornfield where the Spanish were able to deploy their remaining horses to good effect. Cortés renamed the place Villa Segura de la Frontera, and used it as a base for raiding the surrounding countryside. The Spanish began freely taking and branding slaves.

Meanwhile in Tenochtitlan, the smallpox epidemic that had begun shortly after Cortés' arrival claimed the life of Cuiclahuac, along with thousands of other natives. Cuauhtemoc, left behind by Cortés, was made emperor and swore to continue his predecessor's policy of trying to rid the empire of the Spanish.

Concerned Cortés might attack other provinces, Cuauhtemoc sent troops to reinforce outlying areas. Those troops, however, so mistreated the people of Guacachula and Izucar, two of the main places that had been reinforced, that their populations turned against the Aztecs. They betrayed the Aztec forces' positions to the Spanish and gave over their towns to the foreigners.

Unwittingly, the governors of Cuba and Jamaica also assisted Cortés in rebuilding his forces. Two small ships had arrived at Vera Cruz with supplies for Navarez, sent by the still-unsuspecting Velasquez. The crews of those ships were persuaded to come ashore and carry their cargo up-country to Cortés. Another contingent of 60 men, from earlier expeditions Cortés had sent out, rejoined the main body at Segura de la Frontera. Then two

more contingents, which had been dispatched from Jamaica, also arrived. The first group had 53 soldiers and 7 horses; the second had 40 men, all armed with crossbows, and 10 horses.

Smallpox also helped Cortés. As it spread, many leaders among the populace died. Cortés, as a powerful but disinterested party, was asked to settle issues of property and succession. In this way the conquistador was able to select new caciques who favored the Spanish cause, and thus further increased his influence and reputation among the subject peoples of the Aztec Empire.

The Aztecs themselves had fallen into disarray, as Cuauhtemoc struggled against both the epidemic and disruptive forces in his realm.

New troubles arose for the Captain General, though; this time over the ownership of the many new slaves — particularly the female slaves. He had earlier demanded all slaves brought in be turned over to him to be parceled out later. But

somehow, when they reappeared, all the good-looking women were gone. The men accused Cortés of keeping too much of a good thing to himself — a charge he vehemently denied. He generously offered to auction off the beauties to the highest bidders — but only after the final battle was won and all the gold of the Aztecs was theirs. No one believed him.

Cortés moved his army back to Tlaxcala and there ordered the construction of 13 sloops, to be used to gain mastery of Lake Texcoco, and to protect his flanks while the main body marched up the causeways to retake Tenochtitlan.

Return to Tenochtitlan

Texcoco was taken in a brief fight in December 1520. Cortés used that place as a base for assembling his squadron of sloops. A force of 8,000 Tlaxcalans transported the components, and another 20,000 warriors joined him as auxiliaries. The

The Aztec Order of Battle — 20 May 1521

The Aztec numeric system was based on 20, and that format carried over to their military formations. The basic tactical unit was made up of 20 men. Twenty groups of 20 made up a company of 400. Twenty companies of 400 made up an army of 8,000.

Aztec rulers traditionally divided their capital city into 20 regions, each of which was responsible for fielding one army. If there were not enough able-bodied men in Tenochtitlan, the emperor could call in more manpower from outlying areas of the realm to fill the gaps. Of the 160,000 warriors thus raised, most would have been little more than a well-drilled militia, but with seasoned veterans scattered through the ranks.

This huge army (during that era, it would have been considered huge anywhere in the world) was fed largely from the produce grown in its own members' garden plots within the city limits. That is, the Aztec army actually provided for itself while inside Tenochtitlan, and depended on the kindness of strangers when on campaign. (Of course, if the strangers proved unkind, the Aztecs would annihilate them.)

In addition to the citizen-army described above, the Emperor Cuauhtemoc could count on some 10 elite formations, each led by an Aztec warrior-champion. These men made up the orders of the Eagle and Jaguar Knights (other animal-knight varieties are suspected to have existed, but information regarding them is uncertain). By the time of the Tenochtitlan fighting, many in these units were armed and armored with captured Spanish equipment, and had learned to use the stuff almost as well as the Europeans themselves.

The Aztec army at Tenochtitlan also enjoyed aquatic mobility. Knights and many of the regular warriors, had their own canoes and were trained to fight from them. They never went up against the Spanish gunboats, but otherwise often proved deadly on the lake,

especially against enemy formations moving along the causeways.

Other than the Euro-armed knights, each Aztec soldier was armed with a *Mancana*, a combination sword-club, in one- and two-handed varieties. The *Mancanas* looked something like modern English Cricket bats, with the addition of razor-sharp obsidian blades embedded along their narrow sides. They were capable of producing terrible wounds on their first few swings, but the obsidian quickly dulled in battle, reducing the weapons to little more than wooden clubs.

Every Aztec soldier was also armed with a number of throwing javelins, or carried a small bow with obsidian-tipped arrows. Launched singly, these missile weapons couldn't do much harm to the Spaniards. When used in large numbers, as they usually were, at least one in a hundred or so would cause a serious injury to an enemy soldier, rendering him at least temporarily ineffective. Some Aztecs also tried to use captured Spanish crossbows, but they never seemed to have figured out how to aim them properly.

For protection, the Aztecs usually wore quilted cloth coverings over their torsos and abdomens. Those with one-handed *Mancanas* also carried round wooden shields with painted animal hides stretched over them. Thus the Aztecs were truly "light infantry" in the most traditional sense of that term.

The Aztec army of 1521 was a tough, determined lot, willing to fight to the death for their imperial city. Their weapons were inferior to those of the invaders when looked at on a one-for-one basis, but they tried to make their huge numeric advantage counter that deficiency. Fighting on their home ground, under tactically savvy leadership, they were not an easy foe for the Spanish to defeat.

— L. Dean Webb



The Spaniards and Tlaxcalans cross the causeway and break into the city.

same day word reached the expedition a merchant ship had arrived at Vera Cruz from Spain laden with powder, arms and other equipment. This cargo was quickly fetched, giving Cortés the final armament he needed to for the coming battle.

From January to May, Cortés slowly invaded the great city. He subdued those who stayed loyal to Tenochtitlan, and accepted the allegiance of the others. He cut off the city's water supply through the Chapultepec aqueducts.

The sloops, manned by 300 crossbowmen, musketeers, artillerymen (all the cannon were aboard the ships) and oarsmen, held the real key to the war. While Cortés used his other forces to sweep the lake shore and establish garrisons in the towns from which the causeways stretched, his navy fought off all attempts at intervention by the Aztecs. When Cortés finally sent columns marching along the causeways toward the capital, the boats paralleled their course on water, protecting them from assault by the continually probing Aztec canoes.

The Aztecs broke the causeways at the city entrances. Cortés brought up his forces. The sloops met swarms of 40-man canoes in continuous combat; their bow cannon wreaked terrible destruction.

Cortés eventually penetrated into the city, and his men even reached the market square and briefly stood again atop the pyramid temple. The conquistador expected the Indians to sue for peace, but they continued to resist. Failing to clear the city meant that each night the Spaniards had to fall back to base camps, then renew their probes the next day.

Finally, the senior captains proposed during a counsel of war that Cortés conduct a three-pronged

assault into the city, converging on the great market square, where all would reassemble. Once there, they would establish a new fortified camp and remain inside the city. Cortés was doubtful of the plan, but allowed himself to be persuaded.

The three drives immediately encountered heavy resistance, but the Spaniards used their cannon to blast through the defense. Street by street, they pushed forward toward the market square.

Cortés and his column were swept into a trap. The defenders had lain a narrow foot-bridge across a break in the southern causeway. It was so loosely made that in places it sagged into the water. The attacking Spanish swarmed across it, but instead of pausing to properly fill the gap, they pressed ahead into the streets. There they were overwhelmed in a huge counterattack and forced back. The bridge, which had been further weakened by their entrance, could not take the weight of so many in the rush to escape. Spaniards and Tlaxcalans fell into the canal, where they were drowned or killed. Canoes swept in from the lake on both sides.

At the bridge, Cortés tried to check the retreat but had no effect. Heedless of his own safety, he fought wildly. Then he was seized by five Aztec caciques. Rather than kill him immediately, they began dragging him toward the temple altar, where they wanted him to become the greatest sacrifice ever offered to Huitzilopochtli. But a soldier, Cristobal de Olea, sprang to his captain's aid, slaying four of the Aztecs before he was killed himself. Then other Spaniards and Tlaxcalans saw what was happening and rushed in and rescued the conquistador, placing him on a horse and sending him to the rear. That prong of the assault then went back to its base camp, leaving 66 Spaniards captured and a similar number killed outright.

Meanwhile, on the western causeway, Alvarado also met defeat at the hands of the warriors there and was similarly forced to retreat. The Aztecs threw the severed heads of five Spaniards — who Alvarado recognized as member's of Cortés' column — over the wall of his base camp. (Cortés' men were likewise bombarded with the heads of the fallen from Alvarado's column.) The third column also suffered a repulse, but was able to retreat in a more organized fashion.

The three-pronged assault had failed.

The prisoners suffered a fate the rest of the Spaniards could see but were helpless to prevent. Those taken were wrestled to the top of the pyramids and stripped naked. They were then adorned with feather headdresses and compelled to dance in the firelight before the waiting gods. After they had danced enough to satisfy the priests, they were taken, one by one, and thrown on their backs across the narrow stone altar.

The soldiers in the distance watched the priest lift his obsidian knife, curved like an eagle's beak, and saw him open the chest of the prisoner, pull

out his beating heart and offer it to the gods. The body was decapitated and kicked down the stairs, where butchers removed the arms and legs for distribution as food to the people, and the torsos were fed to the wild animals kept in cages beneath the temple.

The Aztecs arranged the severed heads of the Spanish victims, as well as those of the fallen horses, in rows on pikes. They adjusted them to face the rising sun.

Cuahtemoc had the severed hands and feet of the Spaniards sent out to the nearby towns. He declared to their inhabitants that since nearly half the invaders had been killed, it would be best if they broke off their alliances with those who remained. If they did not desert the Spaniards quickly, the emperor warned, the Aztecs would soon return and destroy them.

Final Assaults

The three columns remained in their base camps for the next five days, repelling repeated attacks. Then the warriors of Cholula, Huexotzinco, Texcoco, Chalco and Tlamanalco, who had joined the Spanish in their assault, suddenly returned home without first consulting Cortés. Even the stalwart Tlaxcalans departed. The conquistador's Indian contingent was suddenly reduced from 24,000 to a mere 200.

"Why?" asked Cortés of the lone remaining cacique, a Texcoco named Ahuaxpitzactzin. He explained the allies had observed the Aztecs consulting their gods in the night, and that those gods had promised the destruction of the attackers. Looking around at the carnage taking place already, the caciques had become frightened and ordered their troops to leave with them.

Ahuaxpitzactzin advised Cortés to avoid any more direct assaults and remain in camp for three days. In the meantime, he advised, the sloops should be used to completely interdict the lake, cutting off all supplies of food and fresh water into the city proper.

While the sloops tightened the blockade of the city, the Spaniards took time to properly fill in the holes in the causeways. When the bridges were repaired and the gaps had been filled in securely enough to allow for safe retreats, they resumed the battle.

The Spaniards advanced each day along the causeways, then retired again to their base camps at night. The Aztecs' attacks on the base camps were equally persistent, but thanks to the sloops and the effectiveness of their cannons, that danger gradually diminished. The fight continued in this way for ten days, with the Spanish slowly advancing into more and more of the city, bridge by bridge, street by street.

The 2,000 Texcoco warriors returned, and were joined shortly by Tlaxcalans, Huexotzingans, and a few Cholulans, again swelling the army to

about 15,000. Cortés addressed them, saying they deserved execution for their earlier desertion, but since they had returned, he would pardon them.

The reinforced army again advanced from all three camps. They found the last Aztec water source, a brackish pool, and destroyed it. They increased the destruction throughout the rest of Tenochtitlan by pulling down every structure they came to.

During this destruction, Cortés sent three captured caciques to Cuahtemoc with a demand for surrender. Cuahtemoc discussed the idea with his chieftains, but the Indian priests intervened against it, claiming the gods still promised victory.

Cuahtemoc then managed to assemble a force from three nearby provinces to fall upon the attackers from the rear. However, after an initial victory, that force stopped to loot, which allowed Cortés to dispatch reinforcements against them. The Aztec allies were defeated and retreated back to their homelands.

With the defeat of the relief force, the fate of the Aztecs was sealed. The slow, inexorable advance of the Spaniards could no longer be stopped. Every house came to them demolished, and dumped the debris into the canals to fill them. More fires were set and the residents had to flee deeper into the city to take refuge in houses already crowded.

Starvation and thirst also beset the defenders, driving many Aztecs to the Spanish camps, where they surrendered for a meal. At night, Spanish



In the final assault, the Spaniards and their allies massacre the remaining defenders



This 1975 Mexican stamp commemorates the 450th anniversary of Cuauhtemoc's death.

patrols would come upon Aztecs picking among the ruins for herbs and roots to eat, and in the morning would find scraps of gnawed bark scattered about, torn from patio trees. The dead lay so thick in the streets, Cortés wrote, "that the people had nowhere to stand but upon the bodies."

Cortés sent a gift of food and a final offer of peace to Cuauhtemoc. Again, though, the Aztec priests counseled for war, claiming a victory was assured.

By now the defense had been compressed into the last one-eighth of the city, an area called Tlateloco. Cortés attacked Tlateloco relentlessly on land, while the sloops bombarded it from the lake. Thus the noose was finally tightened in the denouement of what had become a war of annihilation.

The Spanish pressed their attack. Flames burst from the great temple. A few canoes put out onto the lake in an attempt to escape. But a sloop swept down on them and captured the principal passenger, the Emperor Cuauhtemoc.

Brought before Cortés to surrender, the Indian touched the dagger in the Spaniard's belt. "I have done everything in my power to defend myself and

my people and everything that it was my duty to do. Kill me, for that will be best." But Cortés, fearful of committing regicide, kept him alive for four more years, having him killed only after accusing him of taking part in a plot against the Spaniards.

The destruction of the Aztec Empire was complete. It was 13 August 1521, or by the Aztec calendar, the Day of One Serpent in the Year of Three House.

Epilogue

Death rose from the shattered streets on drafts of sickening air, forcing the conquerors to press cloths against their noses as they passed by. Cortés, sickened by the stench, declared Tenochtitlan uninhabitable, and it was entirely abandoned for six months.

Today in Mexico City, a statue of Cuauhtemoc, dressed in regal robes and headdress and boldly clasping a spear, stands in the middle of one of its largest intersections. It is a fitting memorial to the last, defiant Aztec ruler.

Search as you might, you will find no memorial to Hernando Cortés.

Sources

- Burland, C. A. *People of the Sun*. London: Weidenfeld & Nicholson, 1976.
 Blacker, I. and Rosen, M. *The Golden Conquistadores*. Indianapolis: Bobbs-Merill, 1960.
 Crosby, Alfred. *The Columbian Exchange*. Westport, CT: Greenwood Press, 1972.
 Diaz, Bernal. *The Conquest of New Spain*. (J.M. Cohen, trans.) Baltimore: Penguin Books, 1962.
 Hemming, John. *The Conquest of the Incas*. New York: Harcourt, Brace & Jovanovich, 1970.
 McNeill, William. *Plagues & Peoples*. Garden City, NY: Anchor Press, 1976.
 Prescott, William H. *History of the Conquest of Mexico*. New York: The Modern Library, n.d.
 Stuart, Gene S. *The Mighty Aztecs*. Washington: National Geographic Society, 1981.
 The author also gives special thanks to Dr. John M. Doll, who, in the middle of this project, rushed requested reference materials from the United States to Dhahran, Saudi Arabia, including irreplaceable volumes from his own library.

Broken Spears

The following poem was written in the aftermath of the final desolation of Tenochtitlan by an anonymous Aztec survivor, and was originally done in *Nahuatl*, their pictorial language.

Broken spears lie in the roads;
 We have torn our hair in grief.
 The houses are roofless now, and their walls
 Are red with blood.

Worms are swimming in the streets and plazas,
 And the walls are spattered with gore.
 The water has turned red, as if it were dyed.
 And when we drink it,
 It has the taste of brine.

We have pounded our hands in despair
 Against the adobe walls,
 For our inheritance, our city, is lost and dead.
 The shields of our warriors were its defense,
 But they could not save it.

We have chewed dry twigs and salt grasses —
 We have eaten lizards and worms —
 Gold, jade, rich cloths, quetzal feathers —
 Everything that once was precious
 Is now considered worthless.

— L. Dean Webb

Est'd 1976

GAMES BY MAIL

Home of The Errata File

Looking for new, used, or out-of-print games and magazines? We specialize in them!
 Postage paid anywhere (on most orders).
 Ziplocs 2x3"-12x15". Storage boxes. Errata for 200+ games. Free catalogue. Call today!

Games by Mail/The Errata File

P.O. Box 8676, Station "T", Ottawa, Ontario K1G3J1
 Ph (613) 523-3699, Fax (613) 526-3481; GEnie: games.bymail;
 C'serve: 70272,1055; Internet: 70272.1055@compuserve.com

BE THERE WITH THE MEN WHO MAKE HISTORY



7716 \$22.00



0216 \$24.95



8334 \$30.00



0141 \$40.00



8342 \$25.00



9142 \$27.50



6800-9999 \$45.00



5819 \$19.95



6791 \$14.95



3442 \$29.95



5652 \$17.50



0950 \$19.95

Storm the deadly beaches of Normandy and Iwo Jima. Fire round after round at enemy patrols in Vietnam. Let *The Military Book Club* show you war—from every front, from every perspective. Make sure you join our ranks—today!



TAKE ANY
4 for 98¢
with membership



9118-9999 \$27.95



7120-9999 \$36.95



7781-9999 \$35.00



7104-\$15.00



9506 \$19.95



6197 \$29.95



7666 \$19.95



5652 \$17.50



0950 \$19.95



4895-9999 \$35.00



9118-9999 \$27.95



7120-9999 \$36.95



7781-9999 \$35.00



7104-\$15.00



9506 \$19.95



6197 \$29.95



7666 \$19.95

HERE'S WHAT YOU GET WHEN YOU JOIN...
A **GUARANTEE OF SATISFACTION.** Once your membership's accepted, we'll send the 4 BOOKS you've chosen. If you're not 100% satisfied with the books, return them within 10 days at our expense. Membership will be canceled and you'll owe nothing.

THE FREE CLUB MAGAZINE. You'll receive up to 16 issues a year. Each issue reviews the Featured Book Selection(s) plus a wide variety of alternate books from the Club's extensive library.

SHOPPING MADE SIMPLE. To get the Featured Book Selection(s), do nothing—it will be sent automatically. If you prefer another book—or none at all—simply return your Member Reply Form by the specified date. A shipping and handling charge is added to each order.

HUGE DISCOUNTS ON HARDCOVER BOOKS. Save as much as 30% off publishers' edition prices. Club books are sometimes altered in size to fit special presses.

AN EASY-TO-MEET OBLIGATION. Take up to 2 years to buy 4 more books at regular low Club prices. Afterwards, you may resign membership anytime.

RISK-FREE RETURN PRIVILEGES. If you get an unwanted book because your Club magazine was delayed and you had less than 10 days to respond, simply return the book at our expense.

PRICES SHOWN ARE FOR PUBLISHERS' HARDCOVER EDITIONS. CLUB HARDCOVER EDITIONS SAVE YOU UP TO 30%.



7682 \$25.00

6841-9999 \$24.95

5785 \$16.95x



9134 \$22.95



6437 \$24.95



9050-\$14.95



1289 \$18.95



7369 \$19.95



0166 \$24.95



5801 \$22.95



7898-9999 \$65.00



0059 \$24.95



7211 \$24.95



1768-\$18.95



6643 \$24.95

*Counts as 2 choices

X Special edition exclusively for Club members

+ Softcover

THE MILITARY BOOK CLUB

Your #1 Source for Military Books

YES! Please enroll me in *The Military Book Club* according to the risk-free membership plan described in this ad. Send me the 4 BOOKS I've indicated. Bill me just 98¢, plus shipping and handling.

SAVE MORE—BUY YOUR FIRST BOOK NOW FOR \$3.99
☐ Send me the book I've indicated and reduce my commitment to only 3 more books. Bill me an additional \$3.99, plus shipping and handling.

(write book number)
37073 41

Please write book numbers here

37074 09
If you select a book that counts as 2 choices, write the first 4 digits of the book number in one row of boxes and 9999 in the next.

Mr./Mrs. Miss/Ms. (please print)

Address _____ Apt. _____

City _____ State _____ Zip _____

Members accepted in U.S.A. and Canada only. Canadian members serviced from Canada, where offer is slightly different. Sales tax added where applicable. We reserve the right to reject any application.

COM 9/92

Blood For Oil:

The Quest for Fuel in World War II

by Michael Antonucci

The legendary German Field Marshal Erwin Rommel once wrote: "The battle is fought and decided by the quartermasters before the shooting begins."

Students of military history tend to pay lip service to the importance of logistics, preferring to read about tanks and artillery, mass and maneuver, attack and counterattack. The reasons for that bias are easy to understand. There is no obvious drama in examining supply lines, and it is easier and simpler to believe wars are always won on battlefields.

For instance, millions of pages have been written about the tactics and strategies of World War II, but relatively little about how almost every major decision of that conflict was conditioned by the need for one commodity without which no modern army can operate — oil.

The leaders of every nation involved in World War II were aware of how crucial oil supplies were to their war plans. The importance of oil had become apparent during the First World War. As armies became more mechanized, the need for secure sources of fuel and lubricants became the *sine qua non* for military operations. French diplomat Henri Berenger was right when as early as 1921 he explained that, in the next war: "He who owns the oil will own the world, for he will rule the sea by means of the heavy oils, the air by means of the ultra-refined fuels, and the land by means of gasoline and the illuminating oils."

An examination of the belligerents' attempts to secure oil for their countries during World War II, in both the European and Pacific theaters, not only explains many otherwise mysterious events, it also contains important lessons about potential future conflicts.

The European Theater: Pre-war Indicators

*"To fight, we must have oil for our machine."
— Adolf Hitler*

For all his faults as a military strategist, Adolf Hitler must be credited with having as good an understanding of the economic underpinnings of large-scale warfare as anyone in the Nazi high command. Upon his accession to power in 1933, he immediately began a search for methods to increase oil exploration and production.

Between 1933 and 1939, German domestic crude oil production nearly tripled to 4.5 million barrels per year. As was true of most countries in

western Europe, Germany was rich in coal, but poor in petroleum. Under Hitler's orders, German engineers began working to produce synthetic fuels, mostly from coal and lignite, at an unprecedented pace. By 1941, synthetic fuel production had reached a level of 31 million barrels per year. Austerity programs were instituted long before the beginning of the war, and fuel bought from the Soviet Union and Romania was stockpiled against future needs.

Despite all those measures, though, there simply was not enough oil available in Europe to satisfy the huge requirements of a mechanized force in the service of a country with expansionist aims. A panzer division typically consumed 1,000 gallons (approx. 30 barrels) of fuel per mile traveled. Thus, despite the Draconian measures practiced by the *Wehrmacht*, it quickly became clear that optimum German tactics would have to be modified to operate within the limits of available resources. That, as much as any other practical or theoretical factors, led to the conception and practice of the *Blitzkrieg*.

In fact, it is difficult to really overstate the gap that existed between German army fuel needs and the available supplies. The images of panzers rolling across Poland, the Low Countries and France are etched in our minds as characteristics of the new style of warfare Nazi Germany had created. It is easy to forget those panzers made up only a small part of the entire force, and that the German army was far from fully mechanized.

Though it varied from campaign to campaign and unit to unit, as much as 70 percent of German supply transport remained horse-drawn throughout the war. There were 5,375 horses assigned to each infantry division. In fact, as the war dragged on and petroleum became even more critical, horses became more important to the German war effort rather than less.

Even with only its spearhead forces completely motor-driven, Germany could not wage a long mobile war. Germany needed more oil than it had to power its industries as well as the war machines at the front. Thus, at the strategic level, too, necessity became the mother of invention — the *Blitzkrieg* was seen as the solution, whereby enemies could be decisively defeated before fuel supplies dried up.

In 1938, Hitler accomplished the *Anschluss* of Austria with two mobile divisions: the 2nd Panzer Division from Wurzberg, and the S.S. *Leibstandarte Division* from Berlin. Both units were to drive tri-

umphantly through Austria to Vienna. An omen of what was ahead occurred about half way through the operation when both columns ran out of gas. Only frantic phone calls to civilian service stations along the route averted what otherwise would have become a public relations disaster for the regime.

Oil Commandos

Even before the actual shooting started, therefore, the German high command realized merely conquering territory would not be enough to win the war. The fuel supplies of the newly conquered had to be appropriated for German use. The intact capture of enemy oil fields became a primary (and often herculean) task in all their invasions. The opponent could be expected to defend them vigorously, and to attempt to destroy them if forced to retreat.

It would take a skilled group of engineers and technicians to restore a war ravaged oil field or refinery. The army high command's Economics Section prepared for those eventualities by commissioning Maj. Erich Will to form a unit of "Oil Commandos," whose mission would be the technical occupation and repair of captured enemy oil facilities.

The first test of the Oil Commandos came in the Polish campaign. An un-uniformed team of 50 specialists in petroleum exploration and production accompanied the *XXII Corps* in its dash across southeastern Poland, with the aim of seizing the oil fields and refineries of Galicia. The *Blitz* began on 1 September 1939, and by the next day one panzer division of *XIX Corps* had already temporarily run out of gas once, due to a shortage of trucks to carry fuel forward.

The Oil Commandos, however, ran into difficulties of their own. They arrived at the outskirts of the Galician oil fields on 15 September, and set up an office at Jasło. But by the time the *XXII Corps* moved ahead to Winniki, the Soviets had entered the picture and occupied the fields ahead of them. Germany ended up capturing only 30 percent of Poland's oil, and had to negotiate with Stalin for an annual sale of oil equivalent to the other 70 percent.

Still, Hitler was well enough pleased with the efforts of his Oil Commandos to expand their numbers; he created the "Technical Oil Brigade," under Maj. Gen. Erich Homburg. At its peak, the brigade consisted of almost 15,000 men, but smaller groups (called "Kommandos," or detachments) were sent to the field for specific tasks.

The War in the West, 1940-41

From a purely fuel standpoint, the fall of France has to be considered the greatest victory of the war for Germany. That is, for the first and only time, Hitler ended a campaign with more oil than he had when he started.

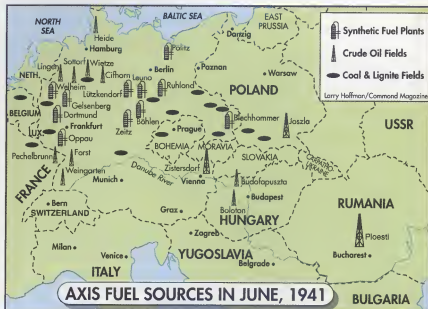
The German army and air force had learned enough from the Polish campaign to build up significant reserves for the war in the West. When that *Blitz* was over, the *Wehrmacht* had captured more than 20 million barrels of oil from the French, Belgians and Dutch. Since the invaders had used only 12 million barrels through the campaign, the conquests represented a net gain of 8 million barrels. (For reference, though, and to show how precarious the Germans' situation remained, the United States in 1940 produced an average of 4 million barrels *per day*.)

During the campaign, the Oil Commandos were deployed to seize the French oil wells at Pechelbronn, in Alsace. On 21 June, with the help of French collaborators, they succeeded in doing so without firing a shot. The French demolition squads charged with destroying the machinery were entirely unsuccessful. Not only did the Oil Commandos get the 1.5 million gallons of petroleum in storage there, they returned production to full capacity in a few months.

The same operation yielded an added bonus in the form of economic intelligence. The Technical Oil Brigade's specialists were able to rifle through the French files for data kept on oil operations and geological surveys in the other countries of Europe. The files on the Soviet Union were of special interest. They were bundled up and sent to Berlin.

Meanwhile, oil also helped decide the Battle of Britain. The Royal Air Force, with access to America's oil, was able to utilize 100-octane aviation gasoline in its Spitfires and Hurricanes. That improved engine performance, allowing faster takeoffs, quicker bursts of speed and larger payloads.

The Germans had to choose quantity over quality. Since producing the higher octane aviation gas would necessarily have meant lower output,





the Luftwaffe command had 87-octane fuel used in their planes. The resultant deficiencies were most keenly felt in decreased "loiter time." With reduced engine performance, German aircraft could only remain in British airspace for 15-20 minutes if they were to have enough fuel to return to base. Considering how close a fight the Battle of Britain turned out to be, any increased performance by the Luftwaffe might well have proven critical to the battle's course.

A Paradox Arises

Early in 1941, with the formation of the Africa Corps to save the Italians from defeat in North Africa, the first of many paradoxes to occur in their quest for oil fell upon the Nazis. As they conquered territory after territory they accumulated more oil, but they also took on the responsibility for the oil needs of the new acquisitions. Since each state taken had been a net oil importer, Hitler found the gap between oil supply and demand widening, even while his nation seemingly was winning the war. Nowhere was that dilemma more evident than in the Mediterranean.

As a German ally in the oil war, Fascist Italy was more of a hindrance than a help. Italy imported 92 percent of its oil in 1939. (The plentiful oil in their colony Libya, ironically, lay just a little too deep to be discovered by the methods of the day.) When the Germans entered North Africa to fight, they also had to take on the task of helping fuel the Italian armed forces.

Rommel worked wonders with the little fuel that got past the British naval/air outpost on Malta, as well as captured enemy stores, but no commander suffered more from fuel uncertainties than he did. As early as June 1941, Rommel wrote: "We knew that our moves would be decided more

by the petrol gauge than by tactical requirements."

He also encountered another oil paradox. With such vast distances to cover in the North African desert, he found he sometimes did not have enough fuel for his fuel-hauling trucks. There were instances when it took up to half of a division's fuel allotment to transport the rest to the front. Trucks would get forward only to find there was not enough gasoline for the return trip.

Oil and Barbarossa

By the end of 1940, Hitler stood astride western Europe, with only Great Britain still actively opposing his designs. The reasons for his turning on the Soviet Union are still debated by scholars today, but clearly oil concerns played at least a part in that decision.

The Soviets had sent over 4.5 million barrels of oil to Hitler before he sent his armies east in Operation Barbarossa. The Soviet Union was at the time the world's second largest oil producer. Despite strict rationing, however, it still had to import oil from the United States to meet its own needs. It was with a view to securing more oil supplies for himself that Stalin forced Hitler's acquiescence to his territorial demands on Romania. That was an ill-considered move, however, in that it certainly doomed the Soviet Union to German attack.

Most of Hitler's crude oil came from the Romanian fields at Ploesti, and Stalin's border land grab on that nation thus put the Red Army uncomfortably close to critical German supply lines. It was at that point Hitler irreversibly committed his nation to an invasion.

In a postwar interrogation, Hans Kolbe, a US spy in the German Foreign Ministry in Berlin, offered this assessment: "The German need to obtain Soviet oil was deemed the primary reason for the attack. Since the Soviet deliveries were insufficient to satisfy German needs for bringing the war [in the west] to a conclusion, the only recourse appeared to be the seizure and exploitation by the Germans of the oil resources of the Soviet Union."

Of course, Hitler had political and military objectives in his invasion as well, namely the destruction of the Communist regime and the Red Army. Those objectives came into conflict with the need for oil once the attack began. In his directive of 21 August 1941, Hitler showed clearly what he saw as the critical goal of the invasion: "The most important aim to be reached before the onset of winter is not to capture Moscow, but to seize the Crimea and the industrial and coal region on the Donets, and cut off the Russian oil supply from the Caucasus area."

That latter area was the one from which flowed 84 percent of the oil produced in the entire Soviet Union. An amazing 72% flowed from around Baku alone, the rest from the smaller com-

plexes at Maikop and Grozny. During the second year of operations in the east, those fields became the primary targets of the German army and the greatly expanded Technical Oil Brigade.

That still was not the limit of Hitler's ambitions. Had he won the war on the Eastern Front, his next big operation would undoubtedly have been one aimed at gaining the oil of the Middle East through pincer attacks launched from the Caucasus and the Balkans, then linking up with the Africa Corps driving up through Palestine. It was a grandiose scheme, but with the Soviets out of the way it might well have succeeded. Fortunately, though, the next Axis oil paradox came into play before they had any chance to begin such a move.

The '42 Campaign to the Caucasus

Capturing the Caucasus oil fields would require draining dry the accumulated German oil reserves. German planners for the operation concluded that even under the most optimistic projections there was only enough fuel for 60 days of full-on campaigning deeper into the Soviet Union. As with the earlier campaigns against Poland and the West, the 1942 operation had to be a *Blitzkrieg* victory, or else the move would suffer slow oil starvation and eventual defeat. Hitler took the gamble.

Army Group A, along with 6,000 members of the Technical Oil Brigade, was sent crashing toward Baku in July 1942. Army Group B was assigned to protect the flank by crossing the Don River and taking (or at least masking) the city of Stalingrad.

From the very beginning, the omens were not good. Unlike the earlier situation in the west, captured Soviet fuel turned out to be useless to the panzers because the Communists ran their tanks on diesel, while the German machines ran on regular gasoline. Therefore Baku had to be not only quickly captured, but its facilities then had to just as quickly be put to use before the *Wehrmacht* ran dry.

By the early fall, Maikop was in German hands, and by December oil was once again flowing from it, despite vigorous efforts by Soviet partisans and saboteurs. But Army Group A never reached Grozny or Baku. Hitler lost sight of his material goal and instead fastened on one of only symbolic importance — Stalingrad. He transferred eight divisions from Army Group A to B, and with its drive thus weakened, A was unable to break into the mountains. Neither could it resist the Soviet counterattack when it came, and Maikop had to be given up on 18 January 1943.

A campaign that was supposed to have lasted only weeks had stretched into months, then years. Fully half of Germany's oil reserves were poured into the Eastern Front. At the start of the 1942 drive, Hitler said, "If I do not get the oil of Maikop

and Grozny, then I must end the war." He should have taken his own advice.

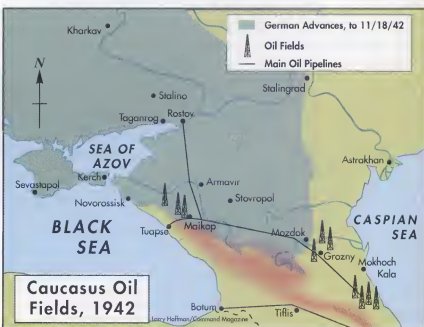
The Allies Strike Back

The Allies were fully aware of the power of the oil weapon. They kept a close watch on German oil production, even sending teams of experts to examine the crankcase oil of downed *Luftwaffe* planes to determine the quality of their lubricants. They were also fortunate in having control of a large percentage of the world's known reserves in America, Russia and the Middle East. Yet even they suffered shortages, mostly due to devastating U-boat attacks on Allied tankers.

By the second half of 1944, once the advancing Red Army had torn Ploesti and its oil fields back out of the Third Reich, Hitler's forces had become almost entirely dependent on synthetic fuel production. The synthetic fuel facilities became primary Allied bombing targets.

Between May and September 1944, Allied bombing reduced German synthetic production by 85 percent. In a single raid on 12 May, 935 Flying Fortress and Liberator bombers attacked the oil facilities at Zwickau, Leuna, Brux, Lutzendorf and Bohlen. Every facility was at least damaged, and half of them were shut down. Albert Speer, Hitler's Minister of Armaments and Munitions, said: "On that day the technological war was decided."

Despite the fact Germany produced record amounts of armaments during 1944, there was not enough fuel or lubricants to put into all those brand new machines. Speer concluded: "The loss of fuel had...a more decisive effect on the course of the war than the difficulties in armaments and communications." By shortly before V-E Day, Germany had been reduced to what amounted to a pre-industrial level through lack of fuels.



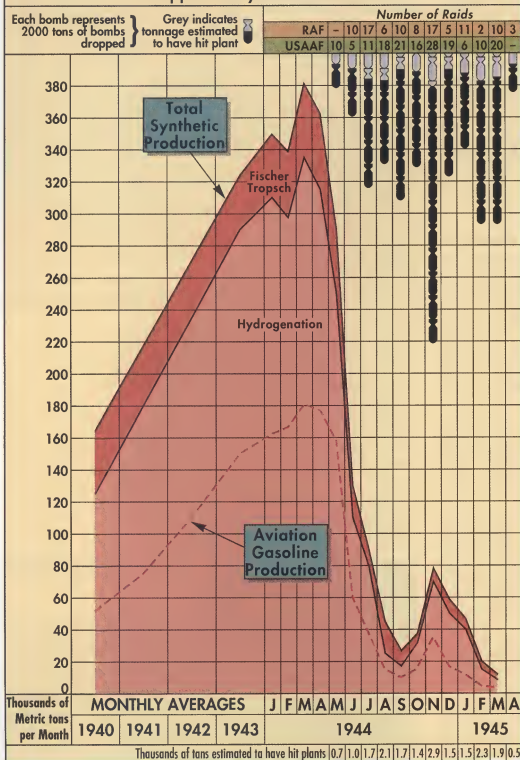
TOTAL SYNTHETIC FUEL PRODUCTION BY PROCESS

Aviation Gasoline Production and Tonnage of Bombs

Dropped on Synthetic Facilities

Each bomb represents
2000 tons of bombs
dropped

Grey indicates
tonnage estimated
to have hit plant



For example, production of aviation gasoline had been reduced by 95 percent, which created yet another oil paradox. Without fuel, the fighters could not fly to protect the oil facilities, which meant more destroyed refineries and therefore less fuel. Rather than waste fuel taxiing, aircraft were towed to runways by teams of cows and horses.

the Netherlands East Indies, and possibly would involve the United States in an early war in the Pacific."

The Japanese, meanwhile, stockpiled as much Californian and Mexican crude as possible, even offering to buy outright one potentially oil-rich area of Mexico.

Speer saw the inevitable end when he encountered a column of 150 trucks of the German 10th Army, each of which had four oxen hitched to it. Even many of the vaunted, hi-tech V-1 and V-2 rockets had to be hauled to their launching sites by horse-drawn wagons.

The Battle of the Bulge drained much of the last German fuel reserves. During its height, the advance guard of the 2nd Panzer Division was reduced to pressing on toward the Meuse River on foot after their tanks had run out of gas.

The primacy of oil was never better demonstrated than during the final battle for Berlin. During that bitter fight, literally thousands of German tanks, planes and guns sat idle in nearby war-houses for lack of fuel and lubricants needed to operate them.

Given all that, it is appropriate Hitler's body was doused with gasoline and cremated after his suicide. It was the final, ironic paradox.

The Pacific Theater

"God was on the side of the nation that had the oil."

— Prof. Wakimura, Tokyo Imperial University

Halfway around the world from Berlin, another Axis partner initiated a war with the United States for the sake of oil. Japanese imperial ambitions had run head-long into its dependency on the United States for petroleum.

Policymakers in America balked at continuing to sell the Japanese fuel for the Imperial Army so it could run roughshod over the Asian mainland. Yet America remained cautious for a time. A pre-war US Navy analysis concluded: "An [oil] embargo would probably result in an early attack by Japan on Malaya and

The drive for oil led Japan into the first oil paradox of the Pacific War. The Japanese, fearful of a US oil embargo, sought to diversify their sources by gaining control of oil-producing territories, but it was precisely that policy which eventually led to the embargo.

Like the Germans, the Japanese were aware of their petroleum vulnerability. Adm. Isoroku Yamamoto, architect of the Pearl Harbor attack, was so concerned about his nation's lack of crude that at one point he personally sponsored experiments by a "scientist" who claimed to be working on a method to transform water into oil.

When the trade embargo against Japan was put in place in October 1941, US military planners realized war in the Pacific had become inevitable. But intercepted and deciphered radio traffic led the Americans to believe the Japanese would head straight for the sources of oil in Indonesia and Malaya. The fields in the East Indies yielded 170,000 barrels of crude a day and were only lightly defended. The idea the Japanese might first make a major effort to put the US Navy out of action did not enter most analysts' minds.

For all their preoccupation with oil, the Japanese overlooked its significance in the one battle where it certainly could have had a decisive impact on the entire war — at Pearl Harbor itself. Fixated on American warships and harbor facilities, the planners never thought to strike the storage tanks that held the fuel supply of the entire US Pacific Fleet.

After their second wave of attack planes returned to the Japanese carriers, some of the pilots tried to convince their on-site commander, Adm. Nagano, to send a third strike against the base's repair and oil facilities. But the admiral, who had at times doubted the feasibility of the entire operation, was unwilling to risk another attack. He gathered his winnings and went home; it was a grave error.

Every drop of oil on Oahu had been transported there from California. Adm. Chester Nimitz, later Commander-in-Chief of the Pacific Fleet, recalled: "All of the oil for the fleet was in surface tanks at the time of Pearl Harbor. We had about 4.5 million barrels of oil out there and all of it was vulnerable to .50 caliber bullets. Had the Japanese destroyed that oil, it would have prolonged the war another two years."

Adm. Husband E. Kimmel, who was relieved of his command of the Pacific Fleet shortly after the attack, agreed: "Had [the Japanese] destroyed the oil which was all above ground at the time...it would have forced the withdrawal of the fleet to the [US west] coast because there wasn't any oil anywhere else out there to keep the fleet operating."

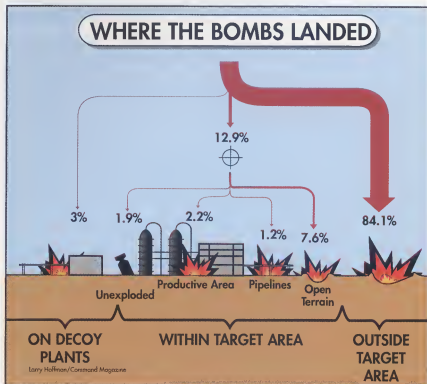
With the Pacific Fleet basing from California, there could have been no Battle of Midway the next spring, and the whole complexion of the war in the Pacific would have changed.

As it was, the Japanese had their way in the Pacific for a short time, and grabbed most of the oil of the East Indies, despite Allied attempts to destroy those facilities. For a time, the Imperial Navy and Army achieved what Hitler never did — oil independence.

Then they ran into another problem that rendered their possession of the oil fields meaningless — the second oil paradox of the war in the Pacific. The Japanese had an insufficient number of tankers to haul the needed oil to their industrial plants in the home islands and the many outposts spread across their vast empire. For the tankers they did have, they demonstrated an increasing inability to protect them from the attacks of Allied submarines, surface ships and aircraft. Oil had to travel thousands of miles to get from the fields of Balikpapan in Borneo to home ports in Japan. The Allies were lying in wait all along the route.

Immediately after taking command of the Pacific Fleet, Adm. Nimitz came to an agreement with Adm. Ernest King, the Chief of Naval Operations, that "the primary objectives of the Allied armed forces were to safeguard their own supply lines and then drive westward in order to capture bases from which Japan's indispensable 'oil line' might be blocked."

One of the most important ship sinkings of the war occurred when the US submarine *Grenadier* sank the *Taiyo Maru* in the summer of 1942. Over 1,000 Japanese petroleum experts and technicians were on board, heading for the Indies to spur oil production. A total of 780 them perished in the attack. By the end of the war, 110 Japanese tankers





had been made victims of American submarines, and joined the *Taiyo Maru* on the bottom of the Pacific Ocean.

The protective measures the Japanese did attempt to take proved to be of little help. US cryptoanalysts had broken the Japanese naval code and were fully informed of tanker schedules and cargoes. The Imperial Navy was slow to respond; it did not establish convoys for the precious tankers until 1943.

Soon the Imperial Navy itself began to feel the fuel pinch. Training cruises were first shortened, then eliminated. Strategic decisions were made based on fuel requirements rather than political or military reasoning. In the Marianas campaign of 1944, for instance, the Japanese battle fleet made no attempt to hinder the Americans' advance because its fuel supply was too low. The Japanese were willing to risk everything to defend the Philippines because those islands' location made them critical for defending the long imperial shipping lanes running from Borneo and Sumatra to Tokyo. But at Leyte Gulf, with Gen. MacArthur's invasion force still vulnerable to counterattack, the Japanese 2nd Fleet, under Adm. Takeo Kurita, turned tail only 40 miles from the beaches. He felt he was too short on fuel to risk an attack.

There were no half-measures during the great Allied counteroffensive in the Pacific War. Gen. Curtis Lemay assigned the entire Guam-based 315th Bombardment Wing to strike at Japanese fuel facilities. By the end of the war, Japanese refinery output was down to six percent of normal, and the civilians in the homeland were reduced to such things as attempting to brew fuel from pine roots.

The futility of that approach was apparent even in Japanese government reports at the time, which disclosed that to meet the target of 12,000 barrels of pine root fuel per day would have required the full-time efforts of 1.25 million workers. Besides, the pine root fuel gummed up engines beyond repair after only a short running time.

The saddest facet of the Pacific oil situation, however, is that the use of *Kamikaze* suicide planes was developed partly as a means to conserve fuel. Though low on aviation gasoline, Japan had an abundance of pilots. According to theory, three suicide planes would be sufficient to sink an American warship, whereas conventional attack required between 15 and 20 Japanese fighter-bombers to do the job. More fuel was saved because those three planes would not require any fuel to return to base.

Some historians, caught up in conventional analysis of Japan's military predicament, have suggested they should have pulled their naval and air forces back to the home area instead of expending lives and materiel fighting in far off places. But an understanding of the oil situation wipes that speculation away. An aircraft carrier does no good in Okinawa or Tokyo Bay if the only fuel available for it is in Sumatra. Thus the final Pacific War oil paradox: just at the time a concentrated Imperial Fleet was needed to repel Allied attacks, it was forced to scatter to maintain proximity to fuel sources.

An appropriate postscript to Japan's defeated drive for oil occurred shortly after their surrender, when a detachment of US sailors went to arrest Gen. Hideki Tojo for warcrimes. He attempted suicide, and it took two hours to find an ambulance with enough fuel to take him to a hospital. Thomas Moorer, who later became Chief of Naval Operations, was witness to the scene, and he reflected: "What I learned then was never lose a war, and the way to lose a war is to run out of oil."

Conclusion

"The war was decided by engines and octane."

— Joseph Stalin

"Above all, petrol governed every movement."

— Winston Churchill

With 50 years and a million pages of analysis between us and the events of World War II, it is easy to forget the lessons learned at that time. Today, with armed forces that are truly and fully mechanized, the nations of the world are more dependent than ever on secure lines of oil supplies

to keep their armed forces operating. We would do well to remember that the best tanks and warships money and technology can create are nothing but inviting targets if they can't move, and oil is still the only substance that can move them. ☼

BRITISH MILITARY HISTORY

Fine Used and Rare Books
and Autographs on the
British Empire, 1600-1935

Illustrated catalogue, \$3.00

OWEN D. KUBIK BOOKS

3474 Clar-Von Drive, Dept. C
Dayton, OH 45430
513-426-8460

The **SUPPLY LINE**

100s OF USED TITLES NEW WARGAMES AT LEAST 10% OFF!

*Call now for a free
catalog, also let us
know the names of
two friends who
would also like a
catalog of their own,
and receive a \$5.00
coupon to be used on
your next purchase.*

1-800-435-4348

P.O. Box 740366 Arvada CO 80006

BUENA VISTA

The Battle of Northern Mexico
February 22 & 23 1847

American Firepower versus Mexican numbers. Zachary Taylor versus Santa Anna A first Class simulation that is a solid fun game. One 22 x 34 map, one counter sheet, 20 pages of rules, examples, and history. Available for \$22 from:

Fifth Column Games
2646 Los Nogales
Rancho Cordova, CA 95670
California residence add 7.75%

Latest Products from Australian Design Group

Planes in Flames: The Expanded Air System for WIF using realistic and colorful plane types (600 counters) \$25.00.

World in Flames: The 5th Edition \$60.00.

Days of Decision: Global Political Conflict 1936-1939 \$40.00.

WIF5 Expansion Kits:

Rule Kit (rules, charts, scenarios) \$15.00
Rules and DOD Countersheet 6 Kit \$20.00
Expansion Kits (as above with WIF5 maps) \$35.00
Countersheets 1-6 Kit \$25.00
WIF5 Maps: \$20.00.

Rub Out: the Gangster game \$20.00.

Mare Nostrum: Handbook on Italian Military in WWII (by Jack Greene) \$14.00.

Australian Design Group
c/o Beth Queman
2760 Knollwood Dr.,
Cameron Park, CA 95682

Make checks payable to ADG. All orders postpaid. Dealer inquiries welcome.

The Official General Eisenhower .45 Automatic

Accompanied by an Original Portrait Signed by John Eisenhower

In observance of the 50th Anniversary of World War II, the United States Historical Society has authorized this official issue honoring the era's greatest military leader, Dwight David Eisenhower, Supreme Allied Commander, strategist of the D-Day Invasion.

This Authorized and Official Issue includes:

The working Government Model 1911 .45 Automatic Pistol Decorated in 24-Karat Gold. The Model 1911 is the most widely used sidearm in the history of the United States military. This firearm is crafted in the U.S.A. by Springfield, one of America's most distinguished names in the firearms industry. Note, this is a working firearm, not a wall decoration.



Each lithograph is produced on the finest 110# acid-free pH-neutral paper and matted and framed (frame size of 15" x 17 1/2").

The Official Eisenhower Portrait, Signed by the Artist and by the General's son, John Eisenhower. Each Eisenhower .45 Automatic will be accompanied by an official lithograph of a portrait created by Jack Woodson, whose work has been commissioned by two Presidents, the Smithsonian Institution, museums and numerous private collectors.

Each lithograph will be numbered and signed by Jack Woodson and each will be signed by the General's son, John Eisenhower.

An Official Issue Unlike Any Other. As an Official Commemorative this is of assured value...a .45 Automatic and a fine lithograph.

Only 2,500 of the Eisenhower Pistols and Portraits Will Ever Be Issued.



Specifications

- Length: 5" barrel
- Caliber: .45 ACP, 7 round magazine
- Grip: checkered walnut, inset with two bronze medallions
- Slide: blued steel, decorated in 24-karat gold

One side of the slide is inscribed in 24-karat gold with Eisenhower's signature. The other, also in 24-karat gold, bears his name, rank and his five stars. The pistol will be engraved with its sequential number of issue, also signed on the accompanying print.

A bronze medallion of Eisenhower's likeness is inset in one side of the walnut grip. A medallion of the SIAACP patch worn by the invasion staff is inset on the other side of the grip.

A velvet-lined American walnut case with the General's signature carved in the lid is an available option. A brass plate, mounted inside the case, is engraved with the legend of this official issue.

Call toll-free, 24-hours a day: 1-800-788-4478.

100% Guarantee of Your Satisfaction.

Once you receive the General Eisenhower Pistol and Portrait, examine them and have them professionally assessed. If after 30 days, you're less than satisfied, you may return them for a full refund.



United States Historical Society

First and Main Streets • Richmond, Virginia 23219

The United States Historical Society is a private, non-profit, non-governmental organization dedicated to historical research and the sponsorship of projects and issuance of objects which are artistically and historically significant. The Official Eisenhower .45 Automatic and Portrait are authorized by and are the copyrighted property of the United States Historical Society, as is this message. ©1992.

Reservation Form

Name

Address

City State Zip

Daytime telephone ()

☐ I wish to reserve The Official General Eisenhower .45 Automatic, accompanied by a framed original lithograph signed by John Eisenhower. The Pistol and Portrait will carry matching serial numbers. The price is \$1,550. Thirty-day return privilege.

☐ I also wish to receive the walnut display case, with engraved brass plaque, \$125.

☐ My deposit of \$250 and ☐ \$125 for the walnut display case is enclosed. I will pay the balance in 10 monthly payments of \$130.

☐ I am charging ☐ \$250 deposit and ☐ \$125 for the case for a total of \$

Charge payment to: ☐ VISA ☐ MasterCard ☐ American Express

No. Exp. date

(Virginia residents please add 4.5% sales tax.)

United States Historical Society • First and Main Streets • Richmond, VA 23219

Dept. CM

GDW AT WAR!!



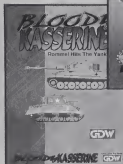
Race for Tunis

Late 1942, America has been in the war for less than a year. Rommel's *Afrika Korps* is in flight from Montgomery's 8th Army, westward across the coast of North Africa. Now the Allies land in French North Africa and close in on Tunisia from two directions. The race for Tunis is on.



GDW:0125
\$18.00

Bloody Kasserine



GDW:0124 \$18.00

Tunisia, early 1943: The Germans have been on the run, but Rommel has arrived. Rommel knows the Germans are outnumbered, but he feels that their edge in combat experience will make up the difference. He proposes a daring attack against the inexperienced American troops at Kasserine Pass.

Command Decision II

The revised **Command Decision** updates and combines the previous edition with **Combined Arms**, allowing play of any scenario from the 1930s to the 1990s. Using a vehicle scale of 1:5 and platoon-sized stands, **Command Decision** reproduces large-scale operational-level battles quickly and cleanly. Organizational booklets also offered separately. GDW:7402 \$15.00



GDW:7400 \$35.00

Troubled Waters

Troubled Waters provides 50 prepared **Harpoon** ship and aircraft forms to refight the actions of the 1973 Arab-Israeli War, the Iran-Iraq War and the Gulf War. Historical scenarios and scenario generators and provided to allow players to create a variety of "What if" situations.

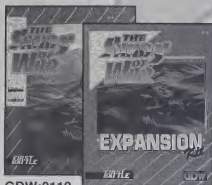


GDW:0750 \$10.00

Phaseline Smash

In this solitaire game you play the US forces on the left hook through the desert in the Gulf War against the Iraqi Republican Guard. A meticulously researched OOB and a dynamic new system make this game a must-have.

GDW:0126 \$24.00



GDW:0119
\$35.00

GDW:0120 \$18.00

The Sands of War

Fifty years of desert warfare! Part of GDW's award-winning First Battle system, this game gives you the exciting end result of a massive research effort on eight different wars and 30 different battles.

Expansion Kit

If you enjoyed **The Sands of War** and wanted more, here it is! **The Sands of War Expansion Kit** adds more maps, counters and scenarios to the original game to expand its scope even further. You must own **The Sands of War** to use **Sands Expansion Kit**.

Blood and Thunder Coming in December

Tactical combat in the east, 1941-45. Finally, in response to overwhelming consumer demand, **First Battle** covers the Eastern Front in WWII. 100% compatible with all **Sands of War** components.



P.O. Box 1646
Bloomington, IL 61702-1646
Voice: (309) 452-3632
FAX: (309) 454-3127

GDW:0127 \$30.00

Sword of Allah

by Jim Bloom

During the half century between 630 and 680 A.D., the mostly unknown Bedouin tribes of the Arabian peninsula, fired by a new and dynamic creed, established an empire that stretched from the Atlas Mountains of North Africa to India's Indus River. In a brief interval equivalent to that separating the present from World War II, the relentless Moslem torrent transformed that vast region into a cultural mosaic which endures to this day.

Despite the obvious importance of those campaigns in military history, their course and details are usually given only brief mention in Western annals of warfare. Appraisals of the armed forces that first advanced the standards of Mohammed throughout the Middle East lie scattered, mostly in scholarly journals seldom read by military history enthusiasts.

Charles Oman, the pre-eminent British military historian of medieval warfare, provided what has become the stock explanation for this omission when he wrote, in his 1885 edition of *The Art of War in the Middle Ages*, that:

The Arabs whom Khalid [ibn al-Walid] and Amru [ibn al-Aas] led in the seventh century to the conquest of Syria and Egypt had owed their victory neither to the superiority of their arms nor to the excellence of their organization. The fanatical courage of the fatalist had enabled them to face better-armed and better-disciplined troops.

Oman goes on to say once the early victories had "settled in," at the end of the seventh century, the Saracen hordes drew sufficient lessons from their Byzantine foe to raise forces of their own more suitable for methodical and dependable wamaking.

All this suggests the Islamic achievements at the dawn of the "Great Conquest" were made by dint of pure self-sacrificial fanaticism, rather than through mastery of the art of war. (This stereotyping of the Arab military "mind set" is reminiscent of late-1930s Western notions of a primitive Japanese style of warfare.) Though Oman and a host of other Western authorities who have written on the subject don't actually demean the initial achievements of the Moslem conquerors, they also don't regard them as having devised a superior military system or technique worthy of study.

Military history texts tend to allude to the first generation Moslem fighters (briefly and in passing)

as opportunistic vultures who picked the bones of the ailing dominant powers of the time — the Byzantines and the Sassanid Persians. The Arabs' preliminary victories against those declining states is attributed to the fact they had recently drained themselves fighting each other and other challengers. Consequently, conventional texts on warfare usually dismiss the extraordinary early victories of the Islamic ascent as little more than a circumstantial fluke — something made possible by a window of opportunity the Arabs just happened to be on hand to exploit.

Typcasting the Arab Conqueror

The stereotypic "human wave" image of the earliest Moslem military methods depicts their initial expansion as a kind of mass migration in which a whole nation outgrew its indigenous resources and overflowed unstable boundaries to engulf the surrounding regions. In this view, the first phase of the Islamic Conquest is likened to the earlier barbarian *Volkerwanderung* (literally, "Peoples' Wanderings") across Germany and into the Roman Empire. The concept of a resettlement of entire populations unschooled in warfare suggests the Moslem conquerors employed an armed horde battle technique.

This interpretation, of course, allows little scope for generalship. Following its reasoning, the renowned commanders of Islam's inaugural epoch are regarded more as dynamic motivators than great strategists or tacticians.

The first Islamic generals are commonly appreciated as exemplary leaders only in that they could rouse the self-reliant desert Arab to prodigious exertions. These charismatic chieftains could thereby capitalize on their fighters' zest for heroic action and plunder — qualities they possessed in abundance. The conventional image is that of a cloud of frenzied sandflies blinding and dazing the formerly strong Byzantine armies. Consequently, the native fighting skills of the Bedouin clans of the Islamic dawn have been considered unworthy of detailed analysis.

Recent research on the Conquest belies that view. New scholarship has demonstrated there was a more sophisticated technique underpinning the seventh century onslaught. The brilliant military career of the master tactician of that pioneering generation, Khalid ibn al-Walid — who was

known to his contemporaries as *Sayf Allah* (or Sword of Allah), demonstrates the validity of this new interpretation.

Khalid's proficiency as a commander, tactician and master of the "operational art," ranks with that of other such intuitively gifted war leaders as Genghis Khan, Sabutai and Tamerlane. Virtually all of today's Arab armies have their elite regiments and divisions named for Khalid and his victories.

Preparation

Khalid was the son (one of five) of a wealthy leader of the Bani Makhzum clan, one of the three leading clans in the all-powerful Quraysh tribe. At birth, as was the custom among noble families of the Quraysh, he was taken from his mother and sent to a Bedouin tribe in the desert, there to be raised by a foster family to condition him to the dry and harsh desert environment.

Soon the boy Khalid came to love the desert and feel at home in it. At the age of six he was returned to his real family in Mecca, where his father instilled in him the traditional virtues of Arab manhood: physical courage, fighting skill, toughness and charity.

In accordance with the division of privilege and responsibility among the three principal clans of the Quraysh, the Bani Makhzum were charged with preparations for war. This included mounting expeditions, breeding and training combat mounts, and furnishing a cadre of officers. This clan mission shaped Khalid's development.

The foremost skill young Khalid had to learn was horsemanship. He was taught not only to ride all manner of trained horses, but also to break wild colts and prepare them for warfare. The best horsemen in Arabia were in the Bani Makhzum, and Khalid became the best of them.

Horsemanship alone, however, was insufficient to master the Arab style of warfare. Khalid also had to master the camel. This animal was the chief beast of burden on long expeditions across arid wasteland, during which unmounted horses tagged along unburdened so as to be fresh for combat.

Additionally, he mastered the lance, the bow, and the sword. He became particularly good with the lance, the principal shock weapon used in mounted charges designed to break an enemy's cohesion, and with the sword, for mounted and dismounted dueling. The latter was valued as the most trusted and revered Arab weapon. The use of the sword was considered indicative of valor, since it required closing with the enemy rather than standing off at a distance.

Since he belonged to a wealthy family, Khalid wasn't compelled to work for a living and thus could spend most of his early years training for war. He became a champion wrestler, which enhanced both his physique and his prestige. He

eventually grew to be over six feet tall and is said to have been ruggedly handsome and irresistible to women.

Khalid was charged with organizing and conveying trade caravans to Syria, where he was exposed to the many cultures of that trading hub of the Byzantine Empire, among them Ghassanid Christian Arabs, Persians from Ctesiphon, Egyptian Copts, and Byzantines from the Imperial center at Constantinople. The knowledge he gained of the restless and smoldering spiritual and ethnic societies within the Eastern Roman Empire were to serve him well later in his career.

Through his teens, Khalid was instructed in the broader aspects of warfare. He learned how to make swift and undetected cross-desert treks, to stealthily approach defended settlements and attack under various conditions of weather, alertness, defensive order and terrain. He learned the importance of catching enemies unaware, of deceiving them as to the moment of attack, and the timing of pursuit against a breaking and fleeing foe.

If Khalid had not been born for battle, he certainly had been bred for it.

Enter Mohammed

As Mohammed consolidated his hold on the unruly clans in the Medina area, his followers began to harass caravans of the Quraysh enroute to Syria. The idea behind taking the caravans was to erode the Quraysh's mercantile power, rather than directly assault them in their base at Mecca. It was during those see-saw mobile engagements Khalid first bloodied his sword.

The first clash came at Badr in 624. With 313 followers, Mohammed set out to intercept a caravan of 1,000 heavily-laden camels as it plied the coastal road near Medina on its return from Syria to Mecca. The Quraysh caravan was able to extri-



cate itself from jeopardy by evasive maneuvering; however, a 1,000-man Meccan force was also dispatched to aid it. Its leader, Abu Jahl, hungered for combat, since he had spent the past 15 years battling the Prophet and his insolent followers. When the caravan saved itself, Jahl ignored the order from Mecca to return.

At Badr, in western Arabia, the outnumbered band of the Faithful routed the Qurayshites and sent them straggling back to Mecca, leaving 70 dead on the field and another 70 captured, at a cost of only 14 Moslem lives.

Seventeen of the Quraysh dead were from Khalid's clan, many of them his cousins and nephews. His brother, Walid, was taken prisoner. Khalid himself had missed the Badr clash, having been out of the country at the time, but was to play a prominent role in the retaliatory foray launched the following year.

Badr had been a simple clash of wills, with victory going to the most prepared and poised force. The next encounter, Uhud, exemplifies the degree of refinement already attained by the Bedouin tribal levies, even during the period of Islamic consolidation in their home area. Uhud also provides the first good evidence challenging the implied premise of the military history rank-and-file that the opening clashes of the Moslem deluge were won through the relentless rush of savage swarms, owing nothing to superior technique.

Uhud: Background, Concentration, Deployment

The displays of anguish and exasperation among the clans of those fallen at Badr were such that it wasn't difficult for Mohammed's spies to discern the shape of the evolving large-scale retaliation. By the second week of March 625, the Quraysh war party had assembled 3,000 men (700 in chain mail) with as many camels, along with 200 horses for the shock troops. Fifteen female camp followers were also sent along with the expedition to keep the men inflamed by shouting infuriating reminders about the debacle at Badr.

The nominal leader of this host was Abu Safayn — a sheikh of the Bani Umayya clan, aided by Khalid's father Walid, and two lesser commanders, one of whom was actually an uncle of Mohammed.

The Prophet had good reason to know the mettle of his domestic enemies. He was unique among the founders of the major religions in being himself one of his movement's foremost combat commanders. Uhud thus also provides a glimpse of Mohammed in combat.

Friendly desert tribesmen kept Mohammed posted on the progress of the Quraysh expedition on its 250-mile march. He wanted to entice that maneuverable force onto the fixed defenses at Medina proper, but his colleagues in arms would

have none of that. They disdained defense in an urban sanctuary, and wanted to aggressively confront the enemy as they approached. Besides, the invaders had set up camp in the Medinans' prime grazing lands, and their allies in that periphery were demanding relief. Thus Mohammed, with 1,000 men, only 100 of them armor-clad, set out to meet the formidable avenging mission.

The Islamic force was almost entirely comprised of infantry, the only two mounts belonging to Mohammed and his adjutant. On the eve of battle, as the Prophet's contingent encamped for the night at a small hillock called Sheikhein, some 300 dissenters (who became known as the "Hypocrites") protested the doubtful wisdom of abandoning their fortifications at Medina and ran back to town, leaving the Moslems with only 700 fighting men.

Mohammed's strategic acumen was here demonstrated by his decision not to impetuously engage the Quraysh in the open, but to anchor his smaller force on the massive feature of Uhud, lying four miles north of Medina.

Uhud rises about 1,000 feet above the plain, and is five miles long. The western part is dominated by a large spur that descends precipitously to the flat ground below. To the right of that spur (looking north from Medina), a valley ascends back from the steep forepart and narrows to a crevice about a kilometer from the crest, beyond which it disappears into the main wall of the ridge. Mohammed placed his forces at the mouth of that valley.

The Moslems formed a solid array with a front only a kilometer wide, its right anchored on a spur, and its left on the base of a low hill about 40 feet high and 500 long, called Einein. Their right was protected, but a fast mounted force could turn their left by riding around Einein. Accordingly, Mohammed placed a picked team of 50 of his most skillful archers atop the hill.

The archers were under the command of Abdullah bin Jubair, whose orders were to shower arrows on any approaching enemy cavalry to keep them from reaching the main body's rear. In no case were the archers to abandon their position, neither to exploit an apparent victory of their comrades below, nor to save them from disaster; for the battle could be decided at a stroke by any enemy cavalry allowed to turn that flank. Einein had to remain in Moslem hands. The Prophet himself took up a position within his army's left wing, adjacent to the crucial Einein post.

The Moslems had also brought a contingent of 14 women. Their task was not merely cheerleading, as with the Meccan women, but to serve as water-bearers and medics, conveying the wounded to the rear and dressing their wounds. Fatima, the Prophet's daughter, was among them.

Thus Mohammed had negated Abu Safayn's advantage in maneuverable cavalry by denying

him his preferred option for battle on the open plain, where he easily could have brought his strength to bear on the Moslem flanks and rear. Instead, the Meccans were forced to fight on a restricted front, diminishing their superiority in sheer numbers and in cavalry. Further, by having his men fight with their backs away from Medina, the Quraysh to the front blocking the way home, he ensured they would fight frantically, since they had no obvious line of withdrawal.

Uhud, Phase II: Opening Moves

The Quraysh moved up from their battle camp a mile south of the spur. Abu Sufayn established his battle array into a main body with two cavalry wings, each of 100 mounted men. The right wing was led by Khalid, the left by Ikrama. Amru ibn al-Aas, another commander who later would gain renown under Mohammed's banner, was made overall cavalry chief, his main task being to coordinate the efforts of the two wings.

Abu Sufayn then moved a line of 100 bowmen forward as skirmishers to initiate the engagement. The Prophet's archers, both those in his main line and on Einein, matched them salvo for salvo. While this was going on, Khalid began to shift his squadron to move around the Moslem left, but was checked by accurate archery from the top of Einein.

This initial part of the battle was capped by a series of individual duels, as both sides sent their best warriors forward between the lines to engage in heroic one-on-one contests.

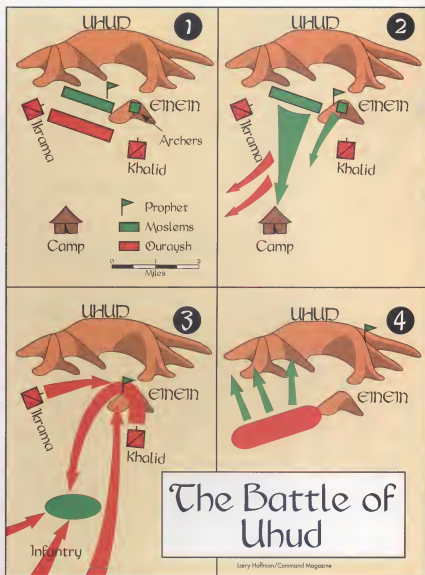
Uhud, Phase III: The Melee

Soon the multiple duels grew into a general brawl, with both front lines eventually drawn into melee. The Moslem superiority in swordsmanship was offset by the Quraysh's weight of numbers.

Khalid again attempted to charge to the Moslem left, where the Prophet was standing, but was again repulsed by the archers on Einein. (During this phase, Mohammed himself participated in the fighting by acting as a target-spotter for his best archer, who stood at his side.)

After several Quraysh standard bearers had been cut down in swift succession, their line began to waver. When those troop-rallying emblems fell and vanished completely from sight, the Quraysh line broke and retreated in confusion, though they succeeded in outrunning their Moslem pursuers, who stopped to plunder the riches of the Meccan camp. The looters became so preoccupied, in fact, they failed to keep watch on the still-intact Quraysh mobile wings of Khalid and Ikrama. The cavalry had fallen back a bit from their original positions, but still maintained their unit integrity and readiness.

Khalid patiently eyed the developing situation, refusing to concede the battle was lost. In particular, he looked for any sign of movement among



The Battle of Uhud

Larry Huffman/Command Magazine

the Moslem archers on Einein. Those men were in fact becoming restless as they watched their lucky associates below seize the rich prizes in the Quraysh camp. Soon most abandoned their hilltop position and rushed to grab their share of what booty remained. Only nine archers held fast as the Prophet had ordered.

Uhud, Phase IV: The Strategem

When the main body of Moslem archers had reached the Quraysh campsite, Khalid charged his horsemen directly toward the remnant still atop Einein. Reaching the summit at full gallop, they were soon joined by Ikrama and his men, who had also been observing developments. The nine remaining archers were driven off or killed.

Next, Khalid's squadron, backed by Ikrama's, pivoted left beyond the hill and charged the remaining nearby Moslems from behind. Part of Ikrama's unit rushed the group standing with Mohammed, while the rest of the Quraysh horse-

men moved on to overrun the distracted looters inside the camp.

When the looting Moslems saw the oncoming enemy cavalry, they stoically dropped their prizes, formed ranks and prepared to resist. At that point, though, the disordered Quraysh main body also saw their cavalry's counterattack and rallied to help. The Moslems were caught between two attacks, and were soon broken into small and disjointed groups, each fighting on its own in an increasingly confused melee of infantry and horse.

Uhud, Phase V: Mohammed's Defiance and Escape

Mohammed had remained at his position, on the left of his original battlefield, while all this developed. Only 30 of his most faithful and battle-hardened fighters were with him. The Prophet attempted to move his group to the protection of a nearby ridgeline, but had only gotten as far as its base when the way was blocked by Ikrama's horsemen. Some Quraysh infantry rushed forward from the other direction, and this fight became a miniature of the one going on at the campsite.

The Prophet's faithful formed a cordon around him and shielded him with their own bodies from the stones and arrows of the attacking Meccans. Islamic literature is filled with lengthy passages about the self-sacrificial last stand of this complement of Moslem holy warriors. It tells of several notorious adversaries attempting to reach and slay the Prophet, only to be pierced themselves at the last instant by well-placed Moslem arrows or swords. Much of this can be written off as embellished fable, but there is no doubt Mohammed and about 15 of his men managed to slip away up a defile of Uhud.

Meanwhile, Khalid was personally involved in the combat at the campsite. When he saw Mohammed was making good an escape, the young officer spurred some of his unit after to make a final attempt at taking him. The terrain (and some would say Allah) favored Mohammed, however, and Khalid had to withdraw in the face of several Moslem fusillades.

The remaining Moslems were either killed or driven off in disarray, and Abu Sayfan gathered his exhausted Quraysh soldiers and moved back to Mecca. In so doing, he sacrificed the chance to march into Medina and deal a decisive blow against the base of Mohammed's presumptuous grassroots movement. In short order, the Prophet rallied his followers and went on to break the economic power of the Quraysh and their pantheon of gods in Mecca.

As for Khalid, upon reflection on the battle, he became so impressed with the superhuman efforts the outnumbered Moslem fighters had put forth in the face of certain defeat, that he soon went over to Mohammed's side and his faith. Khalid became a

key commander in the operations to subjugate the Meccans. After the Prophet's death in May 632, Khalid led Islam's most effective forces during the Ridda Wars (632-633), in which rebelling Moslem apostates were crushed in their efforts to escape the authority of Mohammed's successor, Abu Bakr.

Into Iraq: Walaja

After the conclusion of the Ridda Wars, Abu Bakr ordered Khalid to integrate the many tribes living around the northern periphery of the Arabian peninsula. Aside from expanding the numbers of the faithful, these operations were aimed at replenishing the depleted Moslem war chest prior to launching an expedition to Syria.

These frontier Arabs ranged mostly along the lower Euphrates River, near the border of what is now Kuwait, at the edge of the Sassanid Persian alluvial plain of Mesopotamia. In essence, Khalid attempted to form an alliance with the Arab — though not yet Mohammedan — tribes located at the Moslems' strategic back door, in preparation for the ultimate objective: the conquest of Syria-Palestine.

After thrashing two competently-led bodies of Persian troops at al-Ubullah and Kazima, two Euphrates River settlements just north of the Bay of Kuwait, Khalid regrouped and began actively recruiting among the local ethnic Arab tribes (who by now were duly impressed with the ominous superiority of their counterparts from the desert peninsula).

News of the twin defeats had been dispatched to the Persian Emperor Ardashir in Ctesiphon. He reacted by assembling two separate armies. The first was given to a Persian-Iraqi general named Andarzagh, who had been raised among Arabs and knew their methods. The second was put under Gen. Bahman, one of the top Persian soldiers of the era. He was to assume overall command once the two armies converged after leaving Ctesiphon by different routes (to confuse Arab spies).

There is no reliable record of the Persian strength, but the best estimate is probably around 30,000, divided equally between the two armies.

Based on the Persian perception that the Moslems would never allow an enemy between themselves and the desert, and their suspicion the Moslem objective was the regional center of Hira, Bahman planned to recombine the armies and trap the invaders at a place called Walaja (which is no longer on any map), southwest of Hira on the edge of a great riverine marsh.

Khalid had managed to organize an excellent intelligence network by cultivating the friendship of the local Arabs. Through that network, he was quickly informed of Andarzagh's departure from Ctesiphon, and the later movement of the second army along a more southerly route. As reports continued to come in, they proved so accurate he was able to surmise the planned juncture at Walaja.

Khalid saw his problem as threefold. First, he had to prevent the two armies from combining to overwhelm him. Second, he had to do something to prevent those armies, once he defeated them, from being able to retreat into the Persian hinterlands where they could reform and try again. Third, he still had to maintain a close watch over the new territories just subdued, to prevent any new uprising there from threatening his rear.

His solution to the first problem was to accelerate his own advance so he would arrive at Walaja at the same time as the lead Persian force. The second problem would be resolved, he hoped, by the way in which he would fight and win the upcoming battle. The third he dealt with by posting a few detachments across the lower Tigris area, both to guard it and warn of any enemy crossings or rebellions there from the north or east.

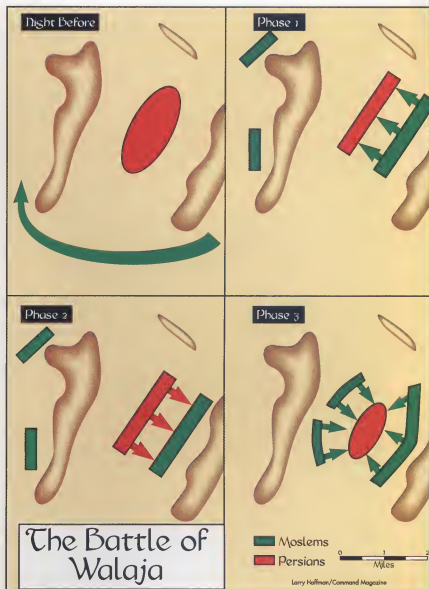
When Andarzagharr arrived at Walaja, there to await Bahman, he was surprised to find the Moslem army already encamped a short distance to the east. The Persians bivouacked in the center of a plain stretching between two low, flat ridges, about 25 feet high and two miles apart. To the northeast lay a third, shorter ridge and a tributary of the Euphrates River. To the southwest, the plain tapered off gradually into barren desert. The Persians kept their backs to the western ridge.

Andarzagharr had been astonished, but not overly alarmed, by the presence of the Islamic force, which he estimated at no more than 10,000 strong. He was even more amazed at the fact they appeared to be almost entirely foot soldiers; he surmised their cavalry had for some reason chosen to fight dismounted. He thought so little of this opposing body he didn't even consider the logical step of resting his army's back on the river, a move that would have secured that approach against enemy attack.

The slow moving Bahman was still about two days away from Walaja when battle was joined the next day in the center of the plain. Despite the disparity of numbers, the fight hung in stalemate for several hours. Khalid fired the spirit of his hard-pressed men by his own exertions in the front rank. He felled a huge Persian champion with his sword and then calmly sat on the fallen man's chest to eat his lunch during a lull. Still, the Persian advantage in numbers gradually began to tell, since they were able to rotate reserves into the fighting ranks.

The Persians slowly pressed the Moslems back, but Khalid's men kept their cohesion. Suddenly, from around the opposite edges of the ridge backing the Persian mass, two bodies of Moslem cavalry descended to attack the Sassanids from the rear. The Moslem infantry, fighting with renewed strength, simultaneously counterattacked in the front. The Arab cavalry soon extended their envelopment to link with the infantry, so the Persians were completely trapped.

Several hundred Persians managed to flee the net, but the thousands of others present were



either killed or taken prisoner. This was a distinct contrast to earlier engagements in the Arab-Persian Wars in which defeated armies had been allowed to disengage. Andarzagharr escaped, but in the direction of the desert, where he soon became disoriented and died of thirst.

Walaja, then, is another example of the much-sought Cannae maneuver (named after Hannibal's route of Varro's Roman legions in 216 B.C.) — a frontal holding attack, followed by a central withdrawal coupled with a powerful envelopment.

In order to maintain security for the operation, Khalid had not informed his main body of the secret movement of two detachments of cavalry, each about 2,500 strong, during the hours of darkness preceding the battle. They had moved around the desert edge of the plain, to lie hidden behind the western ridge at the Persian rear. (While providing security, his silence had made Khalid's personal task of keeping up his infantry's morale all the harder.)

Early Moslem Armies

There is a conventional and inaccurate concept of the Islamic Conquest as a mass migration of whole territorial tribal clusters (as contrasted to purely military forces), carting along their domestic goods for the purpose of colonizing penetrable regions. One consideration belying this notion is the relatively low number of Arab fighters facing their opponents in the major campaigns, which is more indicative of wars fought by a select and specialized group, rather than a population transfer.

Neither were the early Arab armies the haphazardly collected warrior-swarms of popular lore. Even during the life of Mohammed, there was a recruiting system wherein the tax representative assigned to each tribe was also responsible for sorting out an allotment of conscripts. Those men would gather at pre-arranged depots, where they would either be established as an army or dispatched to other units already in the field. In any event, the central authority in Medina would decide where they would be sent, not their sheikh or clan leader.

If the groups responsible for the early conquests in Iraq and Syria were *not* complete tribal gatherings, but rather distinct warrior groupings, then what of the mention of the role of women in the battle narratives? Modern scholars have found that the presence of women and children in the camps behind the Moslem battlelines did not indicate the soldiers were hauling their dwellings, families and goods with them on campaign.

Those camp followers were assigned specific duties in support of the combat troops, such as tending the milk and meat larders (the flocks), providing first aid, rounding up and rerouting back to the front deserters or shirkers, stripping the armor and precious metals from the fallen enemy, and various other bivouac and logistic assignments. At certain phases they might be expected to join the men in combat — as at Yarmuk — but the numbers of noncombatants were never so high as to signify each man brought his family along. There might have been, at most, a four-to-one ratio of men to women — hardly a ratio indicative of familial accommodation.

The Moslem field army was divided into infantry, wielding sword, spear or bow, and cavalry, armed with the lance and a sword or dagger as secondary weapon. The cavalry largely travelled on camelback while enroute to the battlefield. The horses were only mounted for combat, since there were fewer of them, and they needed to be fresh for the exertions of the fight if they were to be effective.

The shortage of horses in the early campaigns meant the major share of fighting fell to the infantry. They utilized skillful archery to hamper the movements of enemy heavy cavalry, and to somewhat offset their enemies' numerical and material superiorities.

The Arabs' effective employment of sparse forces against the two superpowers of the day points up that

efficient organization was a key determinant in the Moslem success. Much of the late-ancient literature describing Arab warfare refers to tribal cohesion within their ranks, to the extent that tribal standards were flown during battle. That doesn't really mean, however, that the armies were organized around tribal units. Though it is agreed tribal fellowship was often a factor in building combat morale, it is also known that tactical requirements did not permit the tribe to remain as the basic building block for the Arabs' overall order of battle. For instance, many battle descriptions depict elements that convey functional roles and tactical capabilities without regard to tribal make up. We read of *ranks* of archers, swordsmen, or mounted lancers. These were arrayed into the "Central Brigade," or *heart*, left and right *flank units*, *wings*, *advance guard*, *vanguard* and *rearguard*. There were also Arab terms to define what appear to have been smaller units of specialists, which were used to strengthen existing formations for special tasks.

It seems at most there were attempts to maintain some tribal integrity within the dictates of tactical formations. But the mixture of specialists and specialties within each tribe meant their members could not all expect to be assigned to the same unit. The Prophet's army was not a "come as you are" force; it was organized functionally. Most formations were multi-tribal, with clan affiliations honored only when tactically possible.

Similarly, the Arab army's chain of command was established independently of any existing tribal hierarchy. The top commander of any army was the *Emir*. Immediately subordinate to and selected by him were the field commanders, or leaders of the major configurations, such as the two wings, the heart, the advance guard, etc.

Next in line were the so-called "commanders of the tens." While this title indicated an army organized on a decimal system, it is really not clear how many "tens" were involved in each of these commands. Nor do we know if this title signified such persons controlled a tenth of the army. Given a typical field force of, say, 7,000-9,000, all this indicates there may have been interchangeable units of perhaps 800-1,000 men within each core element.

Below the "commanders of the tens" (units that Western battle narratives conveniently term "regiments"), there came "standard-bearers," and "leaders," followed by the tribal chief as the lowest designated officer rank (and probably equivalent to a company commander today).

Thus those chiefs were honored by allowing them to control small packets of their adherents, yet they were not automatically given a command in keeping with their civilian standing. The system ensured no sheikh or tribal leader could organize an independent military command by virtue of his tribal authority alone.

The middle and higher leadership was selected strictly on the basis of proven steadfast fidelity to the Islamic ruling party and the state. For example, when Caliph Umar broke the ban on military service for former leaders of the Ridda rebellion, he stipulated their military advice was to be sought, but they were not to be put in actual charge of battle formations. There was still suspicion they might use any new military authority to again subvert their tribal devotees from the "bad old days."

It has been said the greatest advantage the Moslems had was their ability to move cross-country through rugged terrain impassable to the ponderous Imperial armies, which required good roads for their wagons, baggage trains, carts, etc.

Moslem forces didn't need to carry large stores of supplies; when the meat ration gave out, the soldiers subsisted on dates, or even on the coarse rind of sparse desert vegetation when necessary. They could find drinking water in places their enemies never imagined. The endurance and surefootedness of their camels facilitated this great mobility, as did their method of nurturing the energy of their horses on the approach march. In sum, the desert provided the Arabs both a secure line of advance and an impregnable sanctuary into which a retreating unit could flee to regroup and then reappear unexpectedly, fresh for a new fight.

From Walaja, Khalid's force went on to push back Gen. Bahman's column and invest Hira, which was temporarily put under tribute, but was retaken by the Persians when another expedition was sent from Ctesiphon. By then, however, Khalid had already left the scene, having been summoned by Abu Bakr to speed to the rescue of beleaguered Arab forces in the mis-firing Syro-Palestinian campaign that had kicked off in the west.

Conquest of Syria and Palestine

Around the same time Khalid was beginning his Walaja campaign (spring 633), Abu Bakr dispatched four columns (each of about 3,000 at first, later increased to about 7,500) to commence operations in Palestine and Syria. It may well be he had no rational or calculated program for conquest at first. Rather, these initial expeditions seem to have been aimed at merely gleaning the milk and honey from that flourishing area, and not in securing strategic depots or new territories. Like "Topsy," though, the operation "just grewed," especially after several of the once esteemed Byzantine outpost garrisons melted away in the face of the Arab pressure, opening unforeseen opportunities for the raiders.

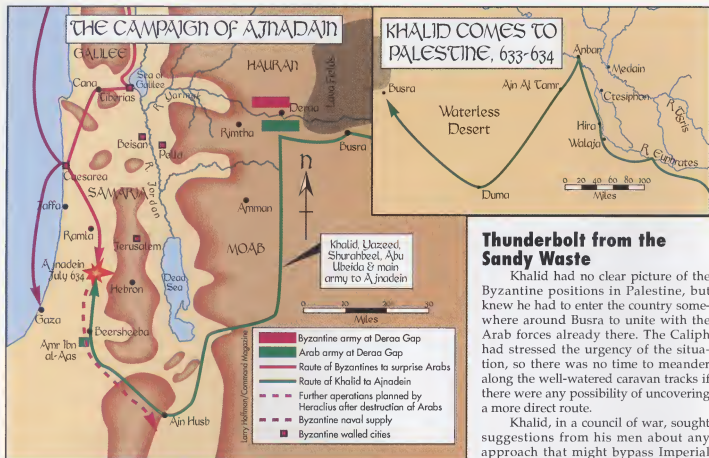
Uncertain of Byzantine dispositions and strengths, Abu Bakr had not assigned a dominant role to any single column. Aware, however, the enemy could certainly concentrate a large army to block progress along any one route of advance, he ensured the paths taken allowed the four separate columns were mutually supporting.

Abu Bakr would die (late in 634) before he could actually see the results of the crusade he began, but the task of mastering the Fertile Crescent's anchor was immediately taken up by his successor, Caliph Umar.

In response to the mounting tempo of clashes in the Syrian theater, and receipt of firm information the Byzantine Emperor Heraclius was at last recognizing and reacting to the magnitude of the growing Arab threat, the Caliph commissioned a full-scale intelligence assessment from his area commander, Abu Ubeida. Thanks to support from large numbers of persecuted and disaffected Monophysite Christian Arabs in Palestine (heretical believers in the complete spiritual divinity of Jesus), the Moslems built an effective intelligence network throughout the region.

This network provided an alarming estimate of the situation. Heraclius had dispatched several legions (or *Turmae*, in Byzantine Greek) to set up camp at the pivot point of Ajnadain, southwest of





well was reported to have been. By then, their guide — the only one in the force who had been there before — had been blinded by the sun. From memory, he described the landmark of a thorn tree shaped like a seated man — that was supposed to mark the water source.

When only one barren twig could be found sticking above the sand, the guide implored his comrades to dig for its root. When that root was uncovered, water flowed from the ground. Those present drank their fill, refilled their bags, and went to collect the stragglers. Soon, all were refreshed and encamped only a day's march from where the desert ended and cultivation resumed. Only then did the anxious guide confess he had last seen the spring 30 years earlier, while still only a boy accompanying his father.

Ajnadein: the Gathering of Forces

From his position at the edge of the desert, Khalid moved on to Busra. Abu Ubeida, Shurabeel ben Hasana and Yazeed ben Abi Sufayn were awaiting his arrival outside the city walls with their own columns. Upon the junction of the Arab forces, Busra was taken under siege and soon signed a pact, agreeing to pay annual tribute in lieu of religious conversion.

The route the Arabs took from Busra to Ajnadein is also not definitely known, but it is probable they proceeded via Jarash and Jericho, skirted around the heavily-fortified garrison in Jerusalem, and traversed the Judean hills stretching south of that great citadel. At any rate, on 24 July 634, they descended onto the plain of Ajnadein, where they were joined by another Arab column under Amr bin al-Aas, which had moved up the Wadi Araba on Khalid's summons.

The encounter at Ajnadein marked the beginning of the end for Byzantine rule in the Levantine corridor. For it, modern scholarship estimates the Byzantines concentrated about 45,000, against about 20,000 for the Moslems.

Ajnadein: Moslem Strategy

The Moslem move to Ajnadein was a deliberate choice, and one not particularly in accord with standard Arab strategy in such situations. Normally, the Arabs would remain at a comfortable maneuvering distance and await a Byzantine movement from their camp. The Byzantines at Ajnadein represented the only immediate threat to the Moslems in Palestine, so such a waiting game could have been played, at least for a while.

If and when the Byzantines came out, the Moslems would have pulled back to the eastern or southern part of Jordan and taken up a position with their backs to the desert; a safe line of withdrawal along which they could regroup beyond the range of the ponderous road-bound Byzantine army. After regrouping, they would launch a series of counterattacks swiftly from unexpected directions.

In this instance, though, Khalid ignored this Arab method of dealing with superior forces. Why he decided to penetrate into the heart of cultivated country, there to confront an Imperial heavy force over twice his own strength, in a place where he was susceptible to envelopment and possible annihilation remains a mystery. Most likely, he chose the risky strategy simply because it had become his character to do so — he had come to favor decisive battle, and would not shirk a good fight in favor of a Fabian strategy.

Ajnadein: the Battle

The actual course of the fighting at Ajnadein is subject to some dispute, since it appears to have been mistaken for later and earlier engagements by several chroniclers of the period. The battle's main claim to relevance lies in its result, however, and not in the unresolved details of its resolution.

There appears to have been a series of bluffs and counter-bluffs, centering on Byzantine attempts to alternately lull and disconcert the Arab command with various moves and parley offers prior to the opening clash. There may also have been some deception and ambush among the key players of both sides before the actual fighting began.

All accounts agree, however, Khalid was instrumental in achieving the concentration and timing of his archery riposte, which unnerved the advancing Byzantines. Despite inferior numbers, the Moslems prevailed, inflicting casualties on their

Women in Early Islam

The contemporary resurgence of Moslem fundamentalism in the Middle East emphasizes sexual inequities in the way the faith suppresses females. The scenes in this narrative revealing an almost liberated self-assertion among the Moslem women of that day may therefore be surprising.

At Yarmuk, Abu Ubeida counseled the Arab women with the army (sheltered in camps immediately behind the lines) to wield tentpoles and stones to "persuade" any Moslem fighter they might discover fleeing the battle. This was not an aberration demanded by an exceptional situation, but was, as other battle narratives of the period indicate, rather an accepted practice.

The women were eloquent at chiding exhausted or dispirited men into stretching the limits of endurance. Their energy and impassioned enthusiasm were instrumental in reversing the tide at crucial points in the Yarmuk fighting. Even more remarkable is the manner in which the women actually entered combat at one point, and thus stiffened the men's resistance by example.

These were not members of some Amazon sect, but women who otherwise performed in the traditional, subservient domestic role. It seems, then, the women of the tribal epoch of Islam were more outspoken and aggressive than has become customary and acceptable in the modern period.

enemy estimated at upward of 30 percent, at a cost of only about 10 percent of their own strength.

Ajnadein: Aftermath

The Mediterranean shore was still not totally open to the Moslems after Ajnadein — large Imperial forces were secure behind several city walls. Khalid, already anticipating the next logical moves, wrote the Caliph for permission to besiege Damascus, and once that city fell to do the same at Emessa and Antioch. The Caliph approved his warhorse's program, but ordered him to halt at Syria's northern border so as not to outstrip the military resources available to the Arabs.

The Emperor Heraclius, thunderstruck at the news of the Moslem victory at Ajnadein, moved his headquarters to Antioch. Expecting the invaders to move against Damascus, he ordered the survivors of the debacle, who had mostly collected at Jerusalem, to block the Moslems at the Yarmuk

River, and inhibit their further advance to buy time for other Imperial forces to gather in Damascus.

Khalid's victorious army skirted around the southern perimeter of Jerusalem and headed northeast toward Damascus, sending only a mounted detachment to monitor Pella, where there was also Byzantine garrison.

The Moslems were prevented from pursuing with their usual vigor due to their enemy's tactic of breaking river banks and dikes, causing whole sectors in the line of advance to become quagmires.

At Pella, Khalid's mounted force succeeded in evicting the Byzantines after a sharp fight. But he had to pause at the Yarmuk River with the main body, where Heraclius' blocking force had just taken up positions on the north bank. Still distressed over their defeat at Ajnadein, however, the Byzantines were not prepared to do anything more than retard the Moslem advance toward Damascus. A battle did take place there in mid-August 634, which resulted in another reverse for the luckless Byzantines. This First Battle of Yarmuk was nothing compared to the major cataclysm that was to occur two years later.

There soon followed another clash with the Byzantine rearguard at a place called Marj as-Suffar, further along the route to Damascus. That city was soon under siege, a Byzantine relief column defeated, and the actual breach of its walls apparently affected by some subterfuge, all within six months. At some time during the operation, Caliph Umar transferred the Arab field command back to Abu Ubeida, but this proved to be a move more titular than real (see sidebar).

Caliph Umar's "Sacking" of Khalid

Abu Bakr's successor as Caliph, Umar, took away supreme command of the Moslem forces in the west from Khalid and returned that honor to Abu Ubeida. The latter was to act as the administrative director, while Khalid remained as tactical leader (or chief of operations), who would exercise supreme authority only when battle was actually joined. At Yarmuk, Abu Ubeida himself seems to have wanted it no other way, especially with such an overwhelming enemy mass assembled on the plain opposite his tents.

Modern interpreters are in accord that the violent, impulsive and audacious Khalid was not the man to re-integrate the newly pardoned Arab veterans of the Ridda revolt. Those men, in response to growing Moslem manpower needs, had belatedly been allowed to join the Palestinian campaign around the time of Ajnadein. Khalid, having only recently been involved in hard fighting against them, did not view those reformed apostates kindly, nor did he trust them.

The older, diplomatic and more cautious Abu Ubeida was more suited to the task of reuniting the recent adversaries for these new and crucial campaigns. In all battlefield decisions, and always, it seems, with Abu Ubeida's astute concurrence, Khalid retained a free hand. Thus the victory at Yarmuk can truly be attributed to the decisions and leadership of Khalid.

Alternative explanations have centered on Caliph Umar's disapproval of Khalid's alleged irreverence, his brutality in dealing with strayed Moslems, and the way in which he reportedly seized women of fallen adversaries and even consummated such unions right on the battlefield.

From our remove, it is hard to know how to put all these factors into perspective. While Khalid was doubtless a headstrong and hotheaded commander, it is doubtful he could have preserved his title "The Sword of Allah" had he been so contemptuous of the moral decency demanded of Islam's early adherents.

Second Yarmuk: the Preliminaries

Heraclius, after watching these developments from Antioch with increasing foreboding, put together an enormous force, reckoned as high as 150,000, to deal decisively with the Moslem onslaught. When Khalid took Emessa, late in 635, some smaller towns in the area opened their gates to the conquerors, but Jerusalem, Caesarea and several coastal towns held on and continued to brace themselves against the Arab torrent until they could be rescued.

The Emperor declared the new war a crusade, and by May of 636 had moved a huge army to northern Syria. All the peoples of the Empire were represented in it: Russians, Slavs, Franks, Italians, Greeks, Georgians, etc. In addition to the customary levies of mercenaries, the depleted state of the Byzantine armies after their recent Persian expeditions compelled Heraclius to rely on large contingents of Armenians and Christian Arabs.

The Armenians were esteemed as warriors during this period, and the Byzantines could claim them as co-religionists, since they had recently converted to Christianity (albeit in a form that was heresy to Byzantium). The Christian Arabs were also nominal allies through the defense of the

cross, but their Monophysite heresy had earlier been harshly suppressed by their Byzantine associates. Thus Heraclius' gathering of the faithful was in reality one that disregarded the sparks of sedition among his nominal friends.

The army was divided into five main groups, each with about 30,000 men. Bahan, King of Armenia, led his kinsmen while also serving as overall campaign field commander. Qanateer, a Russian prince, commanded the contingent of Russians and Slavs. Two Byzantine generals, Gregory and Deirjan, king led mixed all-European groups. Jabla al-Eiham, King of the Ghassans (originally from Yemen), led the Christian Arabs.

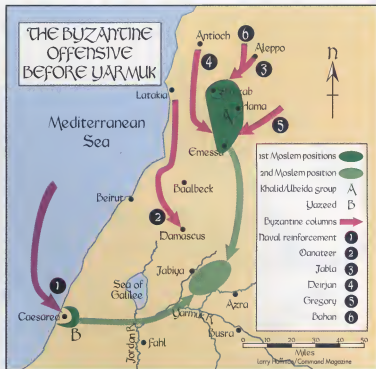
The Moslems had not yet carried out the necessary concentration to meet the new Imperial threat. Amr bin al-Aas roamed through Palestine; Shurahbeel moved across Jordan; Yazeed's group was near Caesarea; and Abu Ubeida and Khalid headed the main body around Emessa (aka Homs). The various forces were not in mutually supporting positions, and each was preoccupied locally with consolidating recent gains and collecting tariffs with for the treasury at Medina.

Heraclius soon perceived the divided Moslem columns were separately vulnerable. He therefore set his forces in motion as follows (see map): 1) while 40,000 men reinforced the garrison at Caesarea by sea to pin Yazeed in that vicinity, 2) Qanateer would move down the coastal route to Beirut, then toward Damascus from the west to cut off Abu Ubeida and Khalid; 3) Jabla would move out from Aleppo directly toward Emessa, by way of Hama, to frontally contain the Moslems in that sector, 4) Deirjan would traverse the coast west of the Aleppo road and close on Emessa from the west, menacing the Ubeida/Khalid group's left; 5) Gregory would hit the right of that same group by driving on Emessa from the northeast; and 6) Bahan's army would follow behind the Christian Arabs and serve as strategic reserve.

Thus the most effective Moslem group, that led by Ubeida and Khalid, would be enveloped and attacked around Emessa by a force ten times its size. Afterward, the Byzantines would march southward while the reinforced garrison of Caesarea pushed from the west. The Byzantines would, in sum, deal with each separated Moslem contingent in a series of individual and rapid blows, each delivered with great numerical superiority.

The ambitious plan immediately began to go wrong, however, when Jabla's Christian Arabs arrived at Emessa only to find the Moslems had already pulled out. Another empty net was hauled in by Qanateer as he advanced on Damascus from the west. It seems the excellent Moslem intelligence network — which included sources among the Byzantine forces — had given the invaders enough warning of the impending trap to escape it.

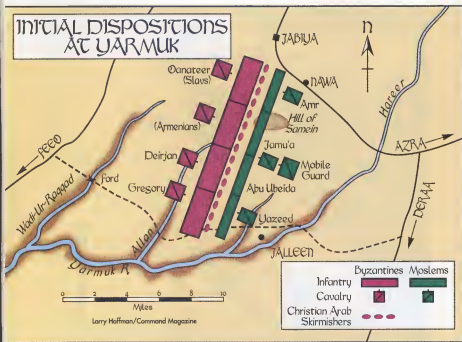
Seeing the immense power of the new Byzantine offensive, Khalid advised Abu Ubeida the best



course was to pull all the forces out of northern and central Syria, as well as Palestine, and concentrate at some point near the desert in case sanctuary was suddenly needed. Ubeida agreed, and soon a plan was set in motion to assemble all their units at Jabiya, in the Golan Heights, the intersection of the primary routes from Syria, Jordan and Palestine. In a generous and clever political move, Abu Ubeida also took the unprecedented step of refunding the tribute payment in the areas being abandoned, since part of its implied agreement involved Moslem protection against all enemies.

A council of war was held among the Moslems concerning the looming showdown with the Byzantines. Some commanders suggested an outright withdrawal into the desert until such time as the Byzantine horde was disbanded or moved away. Khalid advised it would be possible to make a stand, provided they pulled back to the Yarmuk River line, with the desert immediately behind them furnishing a secure avenue for reinforcement or retreat. This move would also avert the unfolding flank threat from the 40,000 Byzantines in Caesarea.

Abu Ubeida, as usual, endorsed the counsel of his operations chief. Once the Arab forces had consolidated, a defensive position was selected on the Plain of Yarmuk. The army deployed so as to meet a Byzantine assault from the north or northwest. While that was being accomplished, Khalid took a cavalry rearguard and harried the Imperial forces beginning to reconcentrate near Damascus. The Byzantines became more cautious in their advance, and so more time was bought to prepare for the inescapable clash at Yarmuk.



By mid-July of 636, forward elements of the Byzantine crusading army began to reach the Yarmuk valley area. Most accounts put the Moslem strength at this point at 40,000, and the consensus is the Byzantines had at least 92,000.

Yarmuk: The Conclusive Battle

The distinguishing features of the battlefield, the Plain of Yarmuk, include three ravines: the Wadi ur-Raqqad, to the Christian rear, the Yarmuk gorge converging on that feature, and a crevasse, called Allan, branching off the Yarmuk and flanking the Byzantines' rearmost line. These gorges were for the most part steep plunges of 100-200 feet, with few footholds. The Yarmuk River continued its course 10 miles southeasterly, where it joined Lake Tiberius (the Sea of Galilee).

The Hill of Samein, some 300 feet high, was near the right of the Moslem front line. It dominated the field of battle and was renamed afterward as the "Hill of Jamu'a" (or "Gathering"). The slightly undulating plain, broken only at the Allan chasm, was ideal for both infantry and cavalry movement.

The Byzantine line was 12 miles in breadth. The Byzantine regular cavalry was integrated throughout the sub-armies; each infantry component deployed forward, with their attached horse established as a reserve to the rear.

The center of the Byzantine line was formed of Bahan's Armenians and Deirjan's Europeans. As Bahan was overall commander, his force was put under the leadership of Deirjan.

The flanks of the army were held by Qanateer and Gregory. Gregory's army on the right had its 30,000 infantrymen linked 10 men abreast with chains to block any breakthrough attempts and to demonstrate the men's steadfastness.

The Christian Arab army of Jabla, entirely mounted on horse and camel, was used as a screen and skirmish line. It was not to operate as an independent force, but was instead to fall back piecemeal among the various units behind them, as required by the ebb and flow of battle. The Byzantine numerical advantage was so great that even with this entire sub-army as a covering force, they achieved a much greater line density than the Moslems. The orderly Byzantine ranks stood 30 men deep.

On the other side, Khalid organized his 40,000 combatants, of whom 10,000 were cavalry, into 36 infantry "regiments" of 800-900 men each, three large cavalry regiments, each numbering 2,000, and a Mobile Guard of the remaining 4,000 horsemen.

Each of the four Moslem "corps" had nine infantry regiments, atypically formed on the basis of tribe and clan (see "Early Moslem Armies" sidebar) to cement them as much as possible with bonds of companionship and family loyalty.

Each of the two flanking corps was assigned a cavalry regiment. The third cavalry regiment and the Mobile Guard formed a central reserve to be committed at the discretion of Khalid.

Each corps, a sparse three ranks deep, sent out a line of scouts to scrutinize the Byzantine formations.

Though shallow, the Moslem ranks were laterally solid, leaving no gaps in their line, which extended about 11 miles. The entire supply of long spears was distributed to the front rank, which also included Yemeni archers. The second and third ranks contained swordsmen. The Moslem plan was to have the archers dissipate the oncoming attacking mass, which would then be spiked on the spear hedgehog. The debilitated remnants would then be assailed by the swordsmen in the second and third ranks.

The flanking corps' attached cavalry regiments could be called on to stabilize or re-establish a threatened position on the wings, while Khalid's independent horse unit and Mobile Guard could serve either as local reserves for the two inner corps or, if needed, as an army reserve to deploy wherever required along the front.

The Moslems and Byzantines alike were secured on their southern margins by the Yarmuk and its branch chasms, with the northern end of both lines being susceptible to outflanking. Behind the Moslems lay the Azra Hills and Jebel ad-Druze wasteland, an impregnable fallback position in the event their retirement became necessary.

The Byzantines viewed the Wadi ur-Raqqad, to their rear, as a hindrance to flight and an incitement to stand fast. Conversely, Khalid looked on that same abyss as an anvil on which he could hammer and crush the Byzantine power.

Yarmuk: Opening Clashes

If we are to take the anecdotal renderings of the early chroniclers of Yarmuk literally, the eve of battle was taken up with several summit meetings between the opposing commanders' emissaries, then between Bahan and Khalid directly. Of course, such talk was to no avail in averting the immense and destructive tumult about to erupt; both commanders only gained new respect for the determination and fearlessness of their adversary. The next morning, 14 August 636, the bloodshed began.

As both lines squared off for battle, the Byzantines were shaken by the sudden and open defection to the Moslem camp of one of their commanders, a General named George. He was reportedly moved by the quiet dignity and unflinching and solemn conviction demonstrated by the outnumbered Moslems. At any rate, his action was symptomatic of the bleed of disgruntled monophysite Christians to the other side.

The traditional phase of the duels between champions opened the contest, and served as a kind of ceremonial warm-up in which the Moslem elite veterans bested the plodding, heavily armored Byzantine challengers.

Bahan chafed at the demoralizing display and opened a limited probing attack to test for weak spots in the enemy's front. The 10 forward ranks of each infantry unit moved up to engage, whereupon they were immediately taken under heavy archery fire. The survivors became entangled in the Moslem spear rampart, while Khalid's second rank filtered up to slash at them. This was not, however, a general assault, and the Byzantines did not press home by reinforcing their engaged forward infantry elements. The fighting continued steadily, though relatively moderately, and the day ended with the Byzantines pulling back their infantry after sustaining more casualties than they had inflicted.

Yarmuk, Second Day: Byzantine Attack & Moslem Counterattack

At Bahan's council of war that first evening it was decided to unhinge the dogged Moslems by reforming during the hours of darkness and launching an attack at first light. Employing maximum force this time, the two central sub-armies would mount holding attacks, fixing the Moslem center, while the enemy flanks would either be pushed beyond effective supporting range or turned inward by all-out charges from Qanateer's and Gregory's forces.

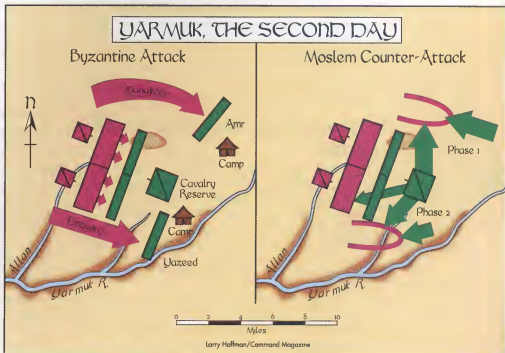
While the Moslems were at morning prayers they heard the drums of the Byzantine advance. Khalid had posted a strong picket line during the night, and they were able to delay the Byzantines' progress enough to allow the main body to form.

The Byzantine center, as intended, pinned but could not steamroll the Moslems opposite them. Meanwhile, Qanateer's Slavs on the Byzantine left put in three determined attacks against Amr's beleaguered band, each attack made with fresh troops. The tiring Moslems were forced back toward their camp on third try. Amr sent his cavalry regiment forward, and it slowed but could not stop the Byzantine advance.

As Amr's retreating command reached their camps, however, they were suddenly assaulted from the rear by the exasperated Moslem women there. The females' use of scorn, rebuke, and tent-poles fired the mens' tempers and enabled them to reverse course and launch a counterattack.

At the same time, the Moslem left was being assaulted by Gregory's men, his chained minions moving more slowly, but more solidly, than the others. They broke through Yazeed's infantry and then repulsed his countering cavalry charge. But Yazeed's retreating forces met the same kind of hostile reception at their camps; their womenfolk challenged their manliness and sent them back to face the lesser menace of combat against men.

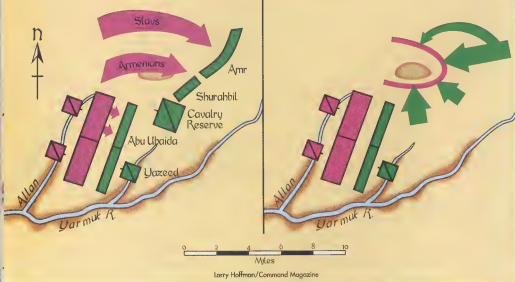
Through all this, Khalid patiently awaited the opportune moment to launch his cavalry reserve. He now sent his Mobile Guard and the independent cavalry regiment toward his right wing, striking Qanateer's force in its flank, while Amr's own counterattack pressed their front. The Slavs soon fell back to their original (and exposed) position.



YARMUK, THE THIRD DAY

Byzantine Attack

Moslem Counter-Attack



Turning next to his left, Khalid augmented Yazeed's counterattack by similarly threatening that Byzantine push on its inner flank. Thus Gregory's encroachment soon began to move back, too, though more slowly because of the chains. In the center, a Moslem cavalry charge broke into Deirjan's bodyguard and killed that Byzantine commander.

By late afternoon both the flanking Byzantine forces were back at their start lines, and their central push was disengaged by sunset. On balance, the Moslems were heartened by their successful response to what had been a critical situation. They had successfully run what amounted to an offensive-defense in the face of the dreaded all-out Byzantine assault.

The Byzantines replaced the slain Deirjan with another general, Qureen, and transferred command of the Armenians to Qanateer.

Yarmuk, Third Day: More of the Same

Having suffered the highest proportion of Byzantine casualties the previous day, Gregory's "army of chains" stayed put, while Qureen led the late Deirjan's command in a diversionary attack against the Moslem center, to tie down Arab reserves, while the combined Byzantine left (both now under Qanateer) threw themselves full force at the seam between Sharahbeel's and Amr's groups.

Again, holding at first, but worn down by repeated buffets from fresh Byzantine troops, Amr's men were forced back into their camp, while Sharahbeel's axis was rotated, his right being

pushed back, and his left holding firm.

There were now breaches in the Moslem front. Once again the Moslem women came through with their rousing harangues to stem the disintegration. Then Khalid dashed his cavalry reserve against Qanateer's right, at the same time as Amr's cavalry regiment circled around to the far right and came in on Qanateer's left. Simultaneously, Amr's and Sharahbeel's infantry counterattacked directly at the head of Qanateer's force. The Byzantines proved more stubborn this time around, and exacted hundreds of Moslem lives as the price for their ultimate retirement to their start line.

This was a harder day for the Moslems, but the end result again boosted their spirits. The carnage suffered by the Byzantines was also greater than the day before, and the Faithful could sense the desperation

growing on the other side.

That night Bahan reprimanded his officers and advised them Day Four would be the critical one. On the other side, Khalid and Abu Ubeida walked among their exhausted and wounded soldiers all night, offering thanks and reassurance. Only those wounded who were actually unable to stand were evacuated to the rear; all others were kept on hand for the impending day's fighting. The archers had so far suffered the most, being reduced to about 2,000 men. These were now re-allocated at 500 per corps.

Khalid was particularly concerned for the steadiness of Amr al-Aas' corps on the right, since it had seen the hardest fighting. But he also knew Amr, perhaps the craftiest of the Moslem leaders, could be depended on to do the utmost to parry any Byzantine move in his sector.

Yarmuk, Day Four: The Wave Crests

Bahan, repeating the now familiar program of the previous days, planned to begin with an attack on the Moslem right, driving it back and drawing Khalid's central reserve units once more to salvage the integrity of the front. This time, though, once those Moslem reserves were committed, Bahan would launch a major blow at the Moslem left, pouring in all his remaining units to exploit the breaches created there.

Qanateer duly set his Slav and Armenian components in motion. Amr, backing off slowly, was barely able to contain the push. Sharahbeel, however, was quickly penetrated by the Armenians, who had been joined by Jabla's Christian Arabs,

and was pressed almost back to his camp and was clearly on the verge of collapse.

Khalid had by this time become wary of committing his cavalry too quickly, perceiving a potential broad-front Byzantine advance, which would render him unable to employ those reserves in a one-two sequence as before. Accordingly, he held back and, to forestall any movement of uncommitted Byzantine forces, ordered Abu Ubeida's and Yazeed's corps to mount pre-emptive spoiling attacks against Qureen and Gregory on the Byzantine right, just as Shurahbeel was reaching his moment of truth.

While his left thus remained more or less out of danger, Khalid split his reserve force into two balanced groups and mounted a pincer assault against the Armenian salient. This saved Shurahbeel and freed his force to counterattack, which resulted in a three-pronged encirclement of the Armenians. They were soon driven back, leaving many dead on the field, though not as many as Jabla's Christian Arabs, who became special targets for their Moslem cousins' fury.

The Slavs thus found themselves suddenly exposed on the Moslem far right, and also had to move back under the force of a counterattack delivered by Amr's group (who had been energized by the spectacle of Shurahbeel's progress).

During the Moslem recovery on their right, their left wing spoiling attacks by Yazeed and Abu Ubeida, after some gains, ran into a ferocious and devastatingly accurate hail of arrows — an obviously well-rehearsed remedy for such a potential set back. Since their own shorter-range bows were useless against the well-positioned Byzantine archers, the two Arab corps fell back to their base line.

Then Bahan, sensing a shift in the momentum, ordered Gregory and Qureen to move up without delay and exploit the Moslem disarray. The already stunned and bleeding Moslems were overwhelmed by the new enemy surge, until only a lone regiment led by Irkama stood fast at the left edge of Abu Ubeida's field. Those 400 men had taken an oath to fight to the death, and all went down in ranks, dying or severely wounded, and taking an inordinate number of Byzantines with them.

Their retreating colleagues didn't make it all the way back to camp this time, since the Moslem women came forward and joined in the battle, wielding tentpoles as well as the swords of fallen warriors. By all accounts, they not only played their role of inspiring the men to redouble their efforts, but this time also fought in the vanguard ahead of the males in many places. The

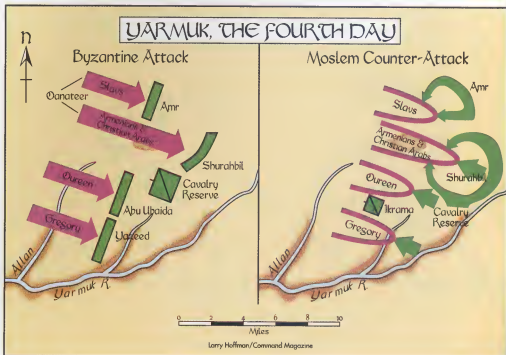
Moslem counter-counterattack in this sector owed nothing to maneuver and everything to sheer exertion at close quarters.

Even though the day ended with yet another restoration of the starting alignments, the balance of success had indeed shifted to the Moslems. The fourth day's fighting represented the supreme Byzantine effort, and all present on both sides discerned a turn of the tide.

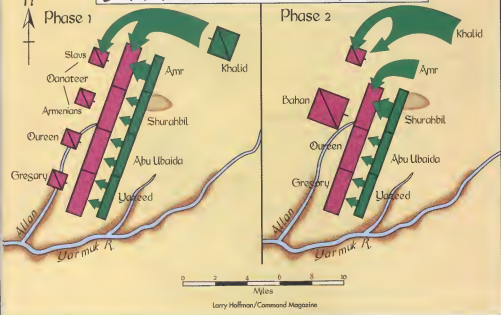
Yarmuk: The Climax

On the fifth morning the two sides dutifully formed up for battle, though slowly and in irregular files. Before the horns could be sounded, though, Bahan's emissary emerged to propose a three-day truce in which to hold negotiations. Khalid sent word back his men were anxious to be finished with this business. Khalid grasped that the Byzantines had lost their stomach for more battle, and while they dallied throughout the fifth day, he made plans for a counteroffensive and reorganized his depleted ranks. All the Arab cavalry regiments were consolidated with the Mobile Guard, giving a total strength of 8,000 horse.

As the sixth day dawned, the commander of the enchained Byzantine force, Gregory, rode forward to offer a single-combat challenge to the Arab commander. Abu Ubeida rode out to accept, though a war council had urged him to substitute Khalid. After brief sword play, Gregory turned his mount and cantered off in feigned flight, planning to wheel about when Ubeida pursued and thus catch the Arab off guard. Abu Ubeida came after the fleeing Byzantine as expected, but was also ready for the turnabout and struck Gregory mortally before that general could bring down his sword.



YARMUK, THE SIXTH DAY, PART I



With that, Khalid ordered a general attack along the entire front.

On his right, Khalid detached a cavalry regiment to immobilize the Byzantine horse opposite. The main Arab cavalry force assaulted the Slavic infantry in the flank, while Amr's infantry bore down on their front. Receiving no support from their own preoccupied cavalry, the Slavic infantry was pressed into the Armenians in the center. Amr then wheeled his force inward to assault the now exposed Armenian left.

The Armenians had already been thrown into disarray by the incursion of the routing Slavs, and were hard pressed to reorganize in the heat of battle. They nevertheless put up a stiff resistance.

As the Byzantine left was thus assailed, Khalid turned to deal decisively with the enemy cavalry there, which so far had been held in check with the detached regiment. This began the second phase of the Moslem thrust.

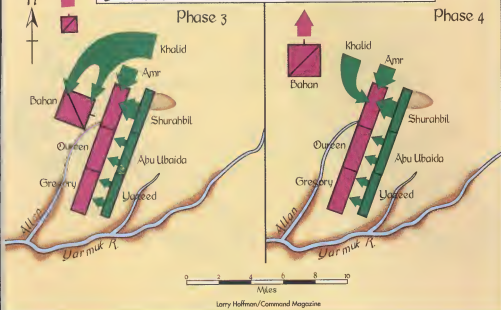
Shurahbeel moved forward to engage the Armenians frontally, as Amr continued to press hard on their flank. Then Khalid succeeded in driving the targeted Byzantine cavalry unit from the field. It was his intent to methodically denude the plodding Byzantine infantry of their mobile support, thus rendering the enemy helpless to execute essential redeployments while engaged.

Bahan had meanwhile detached his remaining cavalry from the infantry units to which they had been attached, and merged them into a single force, positioned behind the center. The new unit had hardly had time to form up, however, when Khalid suddenly set his lighter and faster horsemen on them like wolves.

The Arab cavalry struck, separated, and maneuvered to confound the more cumbersome Byzantine mounted force, until the latter broke off and fled northward with Bahan. The stolidly resisting Armenian foot were then assaulted from behind by Khalid's triumphant cavalry. Unable to

bear up under attack from all sides, the Armenians fled to the southwest, all other avenues having been blocked.

YARMUK, THE SIXTH DAY, PART II



Yarmuk, Sixth Day: Hounds & Hares

The fleeing Byzantines were left unmolested by Arab cavalry, since Khalid was happy to have them go. The remaining Byzantine forces, uncovered by the flight of their neighbors, then began to withdraw, also to the southwest, and were again left go without interference.

As the Byzantines streamed toward the Wadi ur-Raqqad, the Moslem cavalry screened their movement along the north flank, to block any breakout in that direction (but not before several thousand Slavs and Armenians had filtered through the gaps).

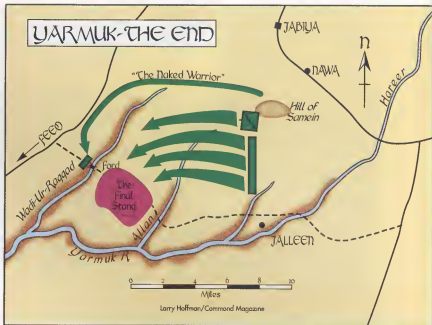
Realizing the northern way out was sealed, the remaining Byzantine commanders directed their men toward a

ford where a single road provided safe passage across the treacherous wadi. The east bank in the immediate area of the ford was not steep, but the west bank rose sharply, creating a potential impediment to an army in full retreat.

The Byzantine officers did not foresee any Moslem interest in manning an obstacle so far beyond the tactical arena, but that is exactly what Khalid had in mind. He sent Zarrar, the legendary "Naked Warrior," with 500 picked men from the Mobile Guard, on a route that skirted the fleeing enemy and placed them on the far bank of the Wadi ur-Raqgad, on the precipice overlooking the ford. (Zarrar actually only liked to fight shirtless, but by chaste Islamic standards that was enough to get him the more dramatic-sounding nickname.)

Yarmuk: The Lethal Finale

Zarrar's concealed detachment revealed itself just as the head of the Byzantine column neared the top of the west bank of the ford, and then began pouring a hail of rocks down on them. Those in front went cascading back down the steep slope, taking those behind with them. The fighters still on the eastern side of the wadi (estimated to be less than a third of the original Byzantine host)



realized the impossibility of trying to force the narrow passage, and quickly formed up facing east to meet the onrushing Moslem main body.

Poetic License or Historical Fact?

It is difficult to pigeonhole the personal anecdotes and hero tales interjected into the narratives of the early chroniclers of this period. Even among more contemporary historians, we often find a fondness for such devices. Say, for example, Gen. Grant is "overheard" in his command tent talking to Phil Sheridan, when there really are no eyewitness accounts of such a meeting.

These scenes are sometimes extrapolated from external evidence, including diaries, hearsay, and the actual course of ensuing events. They generally are not set out by the authors as certainty, but are included as novelistic "popular history" tools to improve the flow of the narrative and hold reader interest. Of course, academic historians frown on the technique; yet such incidents often can not be written off as mere fabrications, only as enhancements.

There is a tendency, therefore, to dismiss the flourishes devised by the politically and religiously motivated inscribers of the 8th to 11th centuries. Modern scholars of that period tend to discredit those early writers as concocting propagandistic parables when it comes to such colorful incidents as the heroics of the "Naked Warrior," the record of the councils in the enemy camp, the duels among the champions, and various other episodes that reinforce the power and allure of the Faith. I've attempted to steer a middle course here, omitting the more whimsical tales, but including the incidents (in subdued form) that might reflect an underlying reality.

In that respect, special mention should be made of

the "sandstorm" at Yarmuk, which Western scholars tend to accept. This version has it that a fortuitous sandstorm blew up suddenly from the desert behind the Moslems during a lull in the fighting. The Faithful then rapidly exploited the situation by launching their decisive counterattack, while the eyes of the Christians were blinded from the grit flying in their faces.

However, none of the Moslem sources record that incident, and it may in fact be attributable to the hurt pride of the Greek and other Western scribes, who wanted to explain away the surprising defeat as an act of God. It does seem unlikely that horse-borne intelligence of the approaching turbulence could have reached the estimated 30,000 intact Moslems still arrayed along an 11-mile front in time for them to mount a concerted counteroffensive.

Another, and perhaps more believable, anecdote involves widespread dissension in the Armenian, Ghassanid, and Christian Arab ranks due to the Byzantine repression of the monophysite theology popular among those men. While there may not have been mass defections in the heat of battle, as some accounts have it, there is no doubt there was a steady seepage of those elements to the enemy camp. The Moslems were not only clever at capitalizing on their enemy's malaise, they offered genuine benefits to any who came over. The story of the defection of Gen. Gregory, for example, may be representative of many such incidents taking place on a daily basis (though not necessarily across the no-man's land separating two primed armies).

The converging Moslem semi-circle, with cavalry in its northeastern quadrant and infantry to the east, amounted to about two-thirds of their starting force. The ensuing fight was a massacre, with the Byzantines having to choose between

taking a fatal leap into the abyss or waiting to be herded over the edge, sword in hand. At the end, Khalid's riders employed their charging mounts to collapse those few remaining Christians still on their feet.

Not content to have pocketed and destroyed the enemy main body, Khalid then raced north to overtake those who had fled with Bahan, catching them a few miles short of Damascus. Bahan formed and led a rearguard to impede the Moslem pursuit, but succeeded only in losing his own life in the futile attempt.

The few remaining Byzantines formed into smaller groups and scattered to the north and west. Khalid didn't bother to hunt down those fragments. His force entered Damascus without opposition, since the residents remembered the Moslem gesture of refunding the tribute when they had pulled back the previous year.

The Early Moslem Conquests: A Short Bibliographic Guide

My principal source for the battle narrative and details of Khalid's background was Pakistani Gen. A.I. Akram's *The Sword of Allah: Khalid ibn Al-Waleed, His Life and Campaigns* (1970), published in English in Karachi, Pakistan. Gen. Akram is not referred to by academic scholars, probably because he confines his own research to a combination of critical readings of original sources and his military-minded examinations of the actual battlefields, against which he then measures the various versions. That is, he doesn't acknowledge modern Western scholarship.

Though Akram tends to accept some inflated (in my opinion) numerical strengths, I relied on his meticulous topographical reconstructions and his application of sound military principles to deduce probable courses of the tactical action. He is a devout Moslem, and tends to be reverent with respect to the legendary stamina of the Islamic patriarchs. Nonetheless, as a military guide he is vital, and — if read with just a pinch of skepticism — he is reliable.

John Bagot Glubb was the commander of the vaunted Arab Legion (Jordanian Army) during the period of the first Arab-Israeli War. He has written many books on Arab history, particularly the military aspects. His *Great Arab Conquests* (Prentice Hall, 1963) deals exclusively with the period considered here. His work is described as "popular history," but he includes excellent discussions of the battles and campaigns. Where he differs with Akram, I deferred to the latter. For example, Glubb places the Battle of Yarmuk about eight miles farther east than shown by Akram. But Akram's rationale for his selection is more compelling. I think, and Glubb neither questions or justifies his acceptance of the whimsical sandstorm tale.

Fred Donner's *The Early Islamic Conquests* (Princeton, 1981), is rich in the ethnic, socio-political and demographic background of Islamic military power. It concentrates on the short span encompassed by Khalid's life. My information for the Moslem order of battle and structure is based on Donner, as are some correctives to a few quantitative fallacies in Akram and Glubb, regarding possible force strengths and related casualties, etc.

M.A. Shaban's *Islamic History, A.D. 600-750: A New Interpretation* (Cambridge Univ. Press, 1971), also provides a solid background for the almost apocalyptic rise of Moslem power, and also gives the pre-Islamic origins for many of Khalid & company's military practices.

Though it's dated, Chapter XI, by C.H. Becker, in the *Cambridge Medieval History*, vol. 3 (1964 reprint of the 1913 edition), "The Rise of the Saracens and the Foundation of the Western Empire," provides an excellent overview and thought-provoking analysis of the topic, with emphasis on warmaking power and its infrastructure.

Conclusions

In contrast to the head-on slugfest at Ajnadin, the Battle of Yarmuk illustrates the sophisticated level of Moslem warfare of the period. Khalid's persistent adherence to an attritional defense until the precise moment the Byzantine will and vitality had been sapped, the detailed sequence of the counteroffensive, isolating the Byzantine cavalry before rolling up their weaker flank with infantry, the astute and well executed phased envelopment, and the final exploitation of the terrain to trap and eliminate the enemy — are all illustrative of a science and art of warfare second to none.

The Moslems lost about 25 percent of their combatants, including those who died later of wounds. They killed about 45 percent of the enemy, perhaps as many as 70,000, about half on the plain and half down the wadi. Another 80,000 Byzantines remained in the theater of operations, manning the defenses of several fortified towns that held out for as long as two more years. (That continued resistance was to no effect, however, since the momentum remained decisively with the Islamic armies, to whom the Yarmuk victory had given complete domination of the countryside.)

One month after this major and irreversible setback, Emperor Heraclius quit Antioch and travelled overland to Constantinople. The operative southeastern boundary of the Byzantine Empire had been cut back to the line of the Taurus Mountains; the fertile crescent was permanently removed from its orbit.

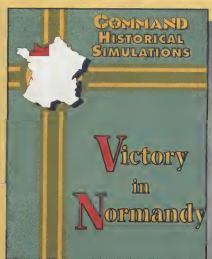
The Yarmuk battle also establishes decisively that Khalid was no mere Herculean scrapper, but a Great Captain of the highest order. That his name is seldom included in the honor rolls of military greats is attributable more to Western military specialists' disdain for his epoch and cause than to any inadequacy in the man himself. ☐



\$17.00



\$20.00



\$15.00

Refight three great battles of World War II. Poland '39 recreates the German invasion of Poland in September 1939. Berlin '45 simulates the final Soviet drive on the German capital. Victory in Normandy takes you from D-Day to the liberation of Paris. Each game includes a rules booklet, full-color map and counters in a zip-lock bag.

XTR Corp. • P.O. Box 4017 • San Luis Obispo, CA 93403

1-800-488-2249 • Fax (805) 546-0570

CA residents add 7.25% sales tax • Foreign residents add \$2.00 for postage



Go for the Gold!



Cortes! is a wargame of the climactic battle for Tenochtitlan. The Spanish player, commanding the Spaniards and their Indian allies, must drive into the city and annihilate the Aztec army. To stop him, the Aztec player has a huge army, spearheaded by elite bands of knights.

Cortes! comes with a rules booklet, a 34" x 22" map and 128 playing pieces. The rules include a set of Beginners' Rules if you're new to wargaming, so you'll be able to start playing immediately.

Cortes! is available for \$12.00, first class postpaid (California residents add \$0.87, foreign residents add \$2.00 for postage). Send check (drawn on a U.S. bank), money order, international money order, Mastercard or Visa information to:

Command Magazine, P.O. Box 4017,

San Luis Obispo, CA 93403.

Phone (1-800-488-2249)

Fax (805/546-0570).

COMMAND MAGAZINE

CASES & BINDERS

Custom-made titled cases and binders, designed to hold a year's issues, provide the storage system you need to help protect your valuable copies. Reinforced board covered with durable, dark-blue, leather-like material with the **Command** logo stamped in silver. The cases are V-notched for easy access. The binders have a special spring mechanism to hold individual rods which easily snap in.

Cases: 1-\$7.95 3-\$21.95 6-\$39.95

Binders: 1-\$9.95 3-\$27.95 6-\$52.95

Order from: Command Magazine, Jesse Jones Industries, Dept. COM, 499 East Erie Ave., Philadelphia, PA 19134. Enclose name, address (no P.O. Boxes please) and payment with your order. Add \$1 per case/binder for postage and handling. Outside USA add \$2.50 per case/binder, payment in US funds only. PA residents add 7% sales tax. **CHARGE ORDER** minimum is \$15.00. AmEx, Visa, MC, DC accepted; send card name, number and expiration date. Call TOLL FREE, 7 days, 24 hours 1-800-825-6690.

SATISFACTION GUARANTEED

The Summer of '42:

The Proposed Axis Invasion of Malta

by Jack Greene and Alessandro Massignani

The island of Malta held the vital Grand Harbor of Valletta and several airfields.

Those facilities gave the Germans and Italians infinite grief during the first half of World War II. Located astride the searoutes used to supply Axis units in North Africa, British forces on Malta were able to inflict mounting losses on their convoys, while forcing others to take circuitous routes, thus consuming more precious fuel.

This process was so troublesome to Rome and Berlin, they periodically tried to suppress the island with air attacks. During April 1942, their air effort appeared completely successful when the local *Luftwaffe* command reported no worthwhile targets remained on Malta. However, as soon as the pressure from the air was lifted (the Axis partners did not have enough planes between them to simultaneously keep the island suppressed and support their North African efforts), the British would rush in supplies and reinforcements, and the cycle would begin again.

Axis Mediterranean strategy for 1942 called for Gen. Erwin Rommel's Italo-German *Panzerarmee Afrika* (or *Armata Corazzata*) to capture the key Allied coastal fortress of Tobruk (Operation Theseus). One effect of this would be to increase Allied air range from Malta, and thus make their support of the island that much more difficult. Once Tobruk had fallen, enough Italo-German strength would be shifted back toward Malta to launch a combined air/sea invasion that once and for all would remove that thorn from the Axis side.

The Italians had begun studies for such an attack on Malta during their invasion and conquest of Ethiopia in the mid-1930s (see *Command* no. 4), when Rome's relations with London had deteriorated considerably. Those studies culminated late in 1938 with a document titled "D.G. 10/A2," which outlined the sea transport needs for moving troops to Africa, and also established the capture of Malta as a prerequisite for the success of that larger effort.

The plan was updated by the Italian army command in 1940, and again in 1941, but their navy showed little interest in the operation. The admirals remained reluctant because they believed complete command of the surrounding seas would be needed before it could be launched (something they could not obtain in 1940-41). Even if the needed sea supremacy were achieved (necessarily at great risk to the Italian navy), the attack would

then evolve into what was primarily an army operation, wherein there would be little glory for the seamen. (Inter-service rivalry was intense in Mussolini's Italy.)

Malta Defenses

Malta is a rocky, limestone island with little vegetation, but a relatively large population for its size (about 250,000 at the time). Much of it is crisscrossed with stone fences, usually five to seven feet high. To the northwest lies the smaller island of Gozo, which was not well defended, and between the two is tiny Comino.

By 1942, the defenses on Malta proper had been made formidable. Except for the extreme north and west coasts (the areas farthest from the key harbor of Valletta), the island was covered by coastal defense batteries. While many of them were old, some dating back as much as 100 years, they still secured the sea area immediately around the Grand Harbor and the adjacent coastal reaches, from St. Paul's Bay to Marsa Scirocco Bay. From the time of the Italo-Ethiopian War, the British began building additional concrete pillboxes, both along the shore and inland. Stretching entirely across the island just north of Musta, there was an old defensive position called the "Victoria Lines." Though laid down in the 19th century, it remained a major obstacle to any invasion attempt.

Fifteen British and Maltese battalions manned the defenses (see sidebar on p.68). Additionally, there were 112 heavy and 144 light anti-aircraft guns, a fair amount of field artillery, and even a few tanks. The soldiers, many of them intimately familiar with the island, could have been expected to put up a stout defense — how long they could maintain it was the only question.

In April 1942, in a move aimed at boosting morale on the island, Lord Gort, a World War I hero and the man who had commanded the BEF in France two years before, was assigned to Malta. At the same time, though, the continuous Axis blockade made it necessary to reduce the islanders' daily bread ration to 10.5 ounces per person. The endurance of the defending troops may well have been limited in any serious fighting.

The Maltese

Fascist propaganda claimed the Maltese were Italians. In fact, through the early 1930s, Italian was the official language in the island's courts. Possibly



15 percent of the Maltese spoke it, but usually as a second language. The contradictions of Italian imperialism were such that at the same time the Rome government was trying to surround the island with fraternal bonds, one of Fascism's primary philosophers, Gabriele D'Annunzio, was uttering: "Malta is no longer an island, but an infection to be cured."

The reality is the Maltese are primarily descended from ancient Phoenician stock, and the native tongue primarily spoken there is Phoenician based — from the same linguistic roots as the language of Carthage and Tyre.

A nascent nationalist movement had erupted on Malta in 1939, which resulted in some dissidents being exiled to Uganda for the duration of the war, but the majority of the people supported the Allied war effort. In fact, it was not unusual for Axis pilots shot down over the island to be pitchforked

to death by angry Maltese farmers. (Reports from the time indicate Italian pilots were more likely to end in such a manner than Germans — it was, after all, the *Regia Aeronautica*, and not the *Luftwaffe*, that had begun the war against Malta.) It is probably safe to assume, then, that Axis paratroopers landing away from supporting troops, or drifting outside their unit's immediate drop zone, would have suffered losses similar to those inflicted on the Germans during the invasion of Crete by the local populace there.

Axis Planning

Early in 1942 the primary call for the capture of Malta came from Mussolini himself; he ordered his military to put together plans for an invasion (codenamed "Operation C3"). The Germans' Grand Admiral Erich Räder agreed with the general intent, and accordingly persuaded Hitler that

Germany should help in the endeavor. The ultimate Axis goal, of course, was complete domination of the Mediterranean, and following that, the capture of Egypt. A push into the Middle East would be next, linking there with another German drive coming down from the Caucasus, and ultimately joining the Japanese in the conquest of India.

The Italian planners quickly discovered they would need two forms of German help to take

Malta. First, they needed the *Luftwaffe*. Italian industry had never been able to produce the number of good planes necessary for an operation like the conquest of Malta. While the Macchi 200 might compare to the British Hurricane, the Italian air force lacked an aircraft capable of dueling successfully with the Spitfires of the Royal Air Force. The Germans had such a plane in their Me 109F, and their first contribution to Operation C3 (code-named "Operation Hercules" in Berlin) therefore

The Malta Invasion Force

From the Air

(German) 7th Paratroop Division: three regiments of three battalions each, with one company of 47/32mm anti-tank guns, three companies of assault engineers ("pioneers"), three anti-tank batteries, one regiment of light artillery, one battalion of engineers and one of service troops.

Folgore Paratroop Division: three regiments of two battalions each, two companies of assault engineers, one artillery regiment, three anti-tank batteries (47mm guns, comparable to the British 2-pounder, but unshielded, making its crew vulnerable), and service troops.

La Spezia Air-Transportable Division: two regiments of three battalions each, one battalion of motorcycle troops, one regiment of artillery armed with older 65mm infantry guns, one regiment of anti-tank guns (24 47mm guns), one company of assault engineers, two companies of engineers, two batteries of anti-aircraft guns, and one of service troops. By the time of its arrival in North Africa, it had a Blackshirt legion (brigade) attached.

From the Sea

XXX Corps

Friuli Infantry Division: two regiments of three battalions each (including a total of 8 65mm guns and 54 81mm mortars), two battalions of the *88th Blackshirt Legion*, 30 L-3 light tanks (comparable to Bren Carriers), one artillery regiment (24 75mm guns), one regiment of anti-tank batteries (24 47mm guns), 150 motorcycles and a battalion of engineers. A total of 10,000 men (which may or may not include the Blackshirts).

Livorno Infantry Division: two regiments of three battalions each (with 8 65mm infantry guns and 63 81mm mortars), two dozen L-3 light tanks, one artillery regiment (24 75mm guns), one regiment of anti-tank batteries (24 47mm guns), 170 motorcycles and a battalion of engineers. A total of 9,850 men. Also attached were 19 47mm *Semovente* (self-propelled) guns.

Corps Troops: 400 men of the *1st Assault Battalion*, and 800 men of the *Loreto Battalion*, both of the *Regia Aeronautica* (Italian air force).

Three hundred *Nuotatori* (swimmers) of the San Marco Marines, in small groups (30 was the usual number). These swimmers were some of the 500 Special Naval Force swimmers trained by Adm. Tur. They were trained for ocean swimming and beach assault.

About 1,900 men of three Blackshirt battalions, with 8 motorcycles and 10 tanks.

Two battalions (totalling about 2,000 men) of the San Marco Marines. Each battalion had four infantry companies, one headquarters company, one 81mm mortar company, and one 47/32mm anti-tank company.

The *10th Armor Regiment* would provide 8 75/18mm *Semoventi*, 230 motorcycles, and 675 men.

Follow-Up Convoy (Mostly From XVI Corps)

Assietta Infantry Division: two regiments of three battalions each (with 8 65mm infantry guns and 45 81mm mortars), two battalions of the *17th Blackshirt Legion*, one artillery regiment (24 75mm guns), one regiment of anti-tank batteries (24 47mm guns), 26 motorcycles and a battalion of engineers. A total of 9,000 men (which may or may not include the Blackshirts).

Napoli Infantry Division: two regiments of three battalions each (with 8 65mm infantry guns and 45 81mm mortars), two battalions of the *175th Blackshirt Legion*, one artillery regiment (20 75mm guns), one regiment of anti-tank batteries (24 47mm guns), 26 motorcycles and a battalion of engineers. A total of 8,900 men (which may or may not include the Blackshirts).

Corps Troops: 24 105mm field guns and 12 149mm cannon. A total of 3,200 men.

From the Friuli and Livorno Infantry Divisions: 19 47mm anti-tank guns, 12 100mm howitzers. A total of 800 men.

From the 10th Armor Regiment: 6 90mm and 12 75mm anti-aircraft/anti-tank guns, 71 motorcycles. A total of 3,800 men.

Gozo Invasion Force (part of XXX Corps)

Superga Infantry Division: two infantry regiments of three battalions each (with 63 81mm mortars), 44 47mm anti-tank guns, 8 75mm artillery pieces, 150 motorcycles and a battalion of engineers. A total of 9,200 men. Also attached were elements of the *San Marco* marines and one battalion of Blackshirts, another 1,000 men.

The four Blackshirt assault battalions were the *42nd* (Vicenza), *43rd* (Belluno), *50th* (Treviso), and the *60th* (Pola). Each was made up of two regular battalions, with attached companies of 47/32mm anti-tank guns, 81mm mortars, and assault engineers.

Grand Total: 96,000 men, 754 guns, 170 prime movers, 850 motorcycles, 270 81mm mortars.

became their *II Fliegerkorps*, along with elements from *X Fliegerkorps* and *Fliegerführer Afrika* (the air command in North Africa), plus additional forces from one fighter and two bomber groups.

The Italians' air contribution was to have been between 800 and 1,000 planes. The total Axis air effort, based on *Regia Aeronautica* records, was structured as follows:

Plane Type	Italian	German
Bombers	270	216
Fighters	222	189
Torpedo Bombers	36	-
Ground Attack	168	27
Transports	170	216
Rescue Planes	24	18
Large Gliders	-	27*
Totals	840	666

Grand Total: 1,506

*Note: At least a dozen, and possibly all 27, of these gliders were to be the huge "Gigant" model.

The second German contribution was to be parachute units and the transports necessary, mostly Ju 52s, to get them to Malta. The famed *7th Paratroop Division*, under Gen. Kurt Student, in conjunction with the Italians' Folgore Parachute Division, would form the core of the airborne assault. The Italian parachutists were reputed to be "living for the invasion," but Gen. Student felt, even though they were certainly motivated, they lacked some of the equipment needed for such an operation.

The final invasion plan called for a three-week preparation phase, during which the island was to be softened up by an all-out air attack. The first week was to see the Axis gain air supremacy over Malta. During the second week, the attackers would concentrate on neutralizing defensive ground positions. In the third week, air attacks would be concentrated specifically against the British anti-aircraft defenses around planned air-drop sites. This was to avoid the kind of fiasco that had taken place near Maleme airfield on Crete, where one intact Allied battery had inflicted heavy losses on the Ju 52s attempting to land there.

Assault From Above

"Y-Time" was set at 1:30 a.m. Just before then, though, one battalion of German paratroopers (under the command of the legendary Col. von der Heydte, who would later lead the last German paratroop into the Ardennes late in 1944) was to land in gliders to ensure the destruction of any remaining anti-aircraft batteries around the main landing zone. Such a move might provide a timely alert to the entire defense, but what it might save in paratrooper lives and transport planes outweighed that risk.

The initial German landing force was to be two regiments of paratroopers, with four gun sections. The Italian contingent was to be one regiment

(three battalions) of the Folgore, and one company of 47/32mm guns. The plan called for the landing of a second wave of paratroopers the same size as the first by end of the day.

As an aside here, it should be noted one myth that still gets into print is that the Germans trained the Italian paratroopers. That is often given as the reason those units fought so well in North Africa, as compared to their other, not-German-trained, countrymen. In reality, the Folgore trained at Tarquinia, in Italy. From 1 September 1941 on, one battalion of Germans, under Maj. Gen. Hermann Ramcke, trained there too. Ramcke was one of the rare German officers willing to work closely with his Italian counterparts. The Italians asked for suggestions and help from time to time, and he gladly provided it. Other than that, though, the Folgore was entirely Italian-trained.

The paratroopers' landing area was to have been on the west side of the island, and was selected with two goals in mind. First, it was to allow the paratroopers to clear and then shield the amphibious beachhead area. Second, the paratroopers were to seize an airfield as quickly as possible, so the Italian air-transportable La Spezia Division and supplies could be brought in.

Wherever possible, Italian aircraft were to attack separately from their German counterparts to avoid confusion and duplication of effort. From Y+3 hours and 30 minutes to Y+6 hours, there were to be, in the words of the official German planning document, "attacks in successive waves by the German air force in continuous support of the paratroopers."

The Italians were to assist in the capture of the first airfield by committing the *Regia Aeronautica's 1st Assault Battalion* (400 men). A follow-up force of 800 men from the Loreto Battalion were to ready the captured field to receive supplies and reinforcements as quickly as possible, while also fighting along side their comrades from the *1st Assault Battalion*.

The site of the proposed airdrop had also been selected with a view toward keeping away from agricultural fields, thus avoiding the stone fences mentioned earlier.

The planned beachhead area, however, suffered from having no real beach. The shore was formed of sloping rock rising quickly from the water's edge. While by no means forming a sheer wall, the area was dominated by high ground. If Allied units retained command of those heights, any landing would become extremely difficult, even with support from the Italian fleet. This is the reason one of the two primary goals of the paratroops was to clear and protect the "beach."

While all this was being undertaken, a 300-man Italian commando unit drawn from the San Marco marine formation and supported by Italian destroyers, German Siebel-ferries (armed with 88mm guns), and aircraft from both Axis air forces, would

The Defenders of Malta

Had the Axis attempted their planned invasion of Malta in 1942, the burden of defense would have rested on the infantry and supporting arms of Malta Command, an independent formation under the British GHQ, Middle East Forces.

Malta Command was made up of 15 infantry battalions (11 regular and 4 Maltese), divided into 4 brigades, totalling some 26,000 men, of whom 8,000 were locals.

The brigade makeup is as follows (note each named unit is a battalion; for example, the 1st Hampshires is the 1st battalion of the Hampshire Regiment):

Southern Brigade (1st Brigade — Brig. K.P. Smith)

- 2nd Devonshires
- 1st Devonshires
- 1st Hampshires
- 3rd King's Own Malta Regiment

Northern Brigade (2nd Brigade — Brig. F.A.J.E. Marshall)

- 8th Manchester
- 2nd Royal Fusiliers
- 1st & 2nd King's Own Malta Regiment

Central Brigade (3rd Brigade — Brig. I. de la Bere)

- 11th Lancashire Fusiliers
- 1st Cheshires
- 2nd Royal West Kents
- 10th King's Own Malta Regiment

Western Brigade (4th Brigade — Brig. F.G.R. Brittorous)

- 4th The Buffs
- 8th King's Own Malta Regiment
- 1st Durham Light Infantry

Though the exact troop strengths and weaponry for them are still unknown for this period, we do know the regular battalions were identical with normal British organization, and were therefore composed of four rifle companies, each with nine light machine guns and three two-inch mortars, as shown in the diagram below.

The battalions of the King's Own Malta Regiment (KOMR) were organized along similar lines, with the exception of the first and second battalions, which had an extra rifle company for replacement of casualties.

The 1st Cheshires was a machine-gun battalion, armed with 48 Vickers medium MGs. They should therefore also have had 16 mortars (4.2-inch), but whether those weapons were actually on the island is in doubt. The Cheshires

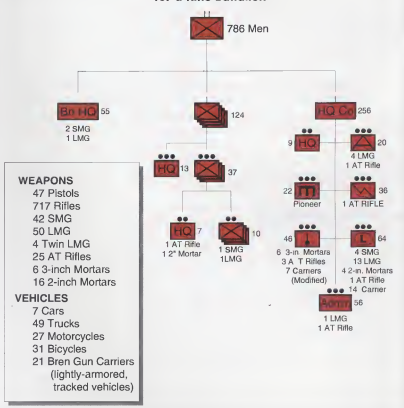
were to have been split into companies and used to bolster the individual brigades, or committed as a central reserve.

The 10th King's Own Malta Regiment was activated in early May 1942, and would have been less effective due to its inexperience and minimal equipment — it had no Bren Carriers or anti-tank guns.

To support the infantry, aside from the heavy and light anti-aircraft regiments and coastal defenses, Malta Command had the 1st Independent Troop of the Royal Tank Regiment. This unit was armed with Matilda II "Infantry Tanks" (each carrying a 40mm cannon and a machinegun), and Vickers Mark VI-C light tanks (two machine guns). The exact number of tanks on Malta is still in question, but it is estimated at no more than 10. Still, the Matildas, with their heavy armor, would have been formidable obstacles to a lightly-armed parachute assault on the airfields.

Finally, the 12th Field Regiment, Royal Artillery, would have provided most of the indirect fire support with its two-dozen 25-pounder (3.45-inch) field pieces. Those guns had a range of about 11,000 meters (6.8 miles), and could have covered much of the island without moving. An *ad hoc* regiment of other mixed guns was also available, and it is likely Malta's anti-air-

**Table of Organization & Equipment
for a Rifle Battalion**



attempt a coup. After swimming ashore at dusk, the commandos were to attack and seize Fort Benghasua at Marsa Scirocco Bay. The harbor there formed a critical component in the plans to land supplies and heavy artillery in the amphibious follow-up wave.

A second group of 300 men from the San Marco unit were to paratroop onto Fort St. Lucian, which was situated on a small island in the center of Marsa Scirocco Bay.

As cover for all this, during the afternoon of Y-Day, Italian planes were to release 200 dummy parachutes, with 20 real commandos mixed among them, across the northern portion of Malta, in an attempt to confuse the British. That same night, shortly before midnight, the first amphibious units were to begin landing, while the force bound for Gozo was to be in place for an attack in the morning. (Comino was to be occupied after Gozo fell.)

The secondary island was to be attacked by the reinforced Superga Infantry Division. When that

task was completed, it was to transfer one of its regiments to Malta for an attack into St. Paul's Bay.

The invasion was to have kicked off during a new moon, so not much air activity could have taken place at night, given the technological limitations of the day. By the end of the second day of the invasion, the area secured between Kalafrana and Zurriq was to be secured, and the airfields of Halfar and Qrendi prepared for use. The La Spezia air-transportable division would then be available for use, landing at one or both of those fields, as needed.

Action at Sea

The Italian fleet would be positioned southwest of Malta. It was to support diversions on the west, near Mellieha Bay and at two other places, while also helping to neutralize the Victoria Lines. It also had to stand ready to intercept any British naval units approaching from Alexandria or Gibraltar, while protecting the invasion convoy. The naval

craft guns would have been used to support the ground defense. Despite some shortages, an "invasion

reserve" of ammunition for all weapons had been stockpiled.

While the organization for the defense of Malta can be pretty well determined, the actual condition of that defense remains more questionable. The main article discusses the appalling food shortages undergone by the island's population — a shortage shared by the troops. Even more critical was the lack of training for the infantry. The sketchy defense plans indicate that some 10,000 of the troops were to hold the old forts dotting Malta. (Those positions were old, but could have proved major obstacles if defended by machine guns.) The other 16,000 troops were to "maneuver" against the invaders.

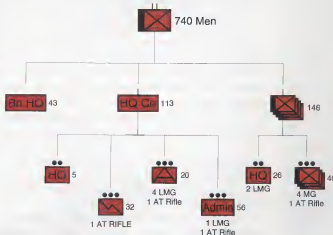
But with no real enemy to fight on the ground, the troops on Malta came more and more to be used in other capacities. Some, particularly the KOMR, manned beach posts and guarded supply dumps. Others were stationed at airfields to service planes and repair bomb damage; many were held at Grand Harbour to unload ships that made it through the Axis air-sea gauntlet.

The tanks were also parcelled out to airfields for "other" duties, such as acting as tractors for damaged aircraft and bulldozers for wreckage.

A full two months of training would probably have been needed to sharpen the skills necessary to defeat an attack. This training requirement might have been met had British military intelligence (perhaps through ULTRA) determined an invasion was truly being scheduled.

— John D. Burt

**Table of Organization & Equipment
for a Machine Gun Battalion**



WEAPONS

174 Pistols } Every man carried one or the other.
566 Rifles } Pistols were carried by officers, some
NCO's, and most heavy-weapon crewmen.

13 Light Machine Guns (Bren Guns)
48 Machine Guns (Tripod-mounted for stability and accuracy)
18 Anti-tank Rifles (Useful only against lightly armored vehicles)

VEHICLES

7 Cars
49 Trucks
27 Motorcycles
31 Bicycles
21 Bren Gun Carriers

force was to consist of two Littorio-class battleships (new 15-inch-gun ships), two older Duilio-class battleships, four heavy cruisers, eight light cruisers and 21 destroyers.

Two days were to be allowed for all the amphibious landings, during which the Duilio-class battleships would offer the primary shore bombardment support against enemy fixed positions. About 200 rounds were allotted to each ship for such missions.

Both German and Italian submarines were to deploy for scouting and interception of enemy naval forces. One submarine was to surface and act as a beacon for the paratroop-carrying planes on their way to Malta. Over 30 MAS PT-type boats and 31 larger Italian torpedo boats were to be used in the operation as well.

Malta: The Japanese Plan

Representatives of the Japanese military attended the Italo-German planning meetings for the Malta operation on 20-23 February 1942. An Adm. Abe was their highest ranking officer present.

The Japanese delegation's suggestions were based on their recent experiences in the Philippines and Malaya. They offered eight key observations.

1. Careful planning was indeed required.
2. Security for the operation was the paramount consideration.
3. Use *Alpini* (Italian mountain-infantry units) for the invasion. They would be lightly-equipped and therefore less of a load for the amphibious craft, and also constituted something of an elite force, like the Japanese SNLFs (Special Naval Landing Forces).
4. Once engaged, objectives had to be taken swiftly through grim determination and by achieving local superiority.
5. The first wave ashore should be infantry, the second machinegun troops, and the third should contain the artillery.
6. Absolute radio silence needed to be practiced and enforced prior to the actual assault.
7. The assault force should be assembled together in the same few boats and land as a unified group.
8. Violent air attacks should take place just after the landing was conducted.

The Japanese also recommended a purely seaborne operation, the abandonment of the airborne portion, and also advised going in at night. They calculated the attack would require three Japanese-style divisions, totalling 23 infantry and 6 artillery battalions.

The Japanese and Italians differed on the planned use of airpower in the operation. The Italian plan called for a great deal of independent air action all around the island, while the Japanese believed all air activity should be directly controlled by the involved navy and army commanders. (During the war the Japanese didn't have an organizationally independent air force, and their proposal reflects that.)

Amphibious Assaults

There were to have been two primary landing zones. The main one was in the Famagosta area, while a secondary effort was made in the Larnaca area. A total of 1,900 men were to go ashore in the latter operation. This force would be drawn from three lightly-armed Blackshirt battalions, along with three companies of San Marco marines. The main landing at Famagosta was to be made by the main body of the San Marco Marine Regiment, a total of about 2,000 men organized into two battalions (the Grado and Bafile).

The men of the Italian XXX Corps (the Friuli and Livorno Infantry Divisions, supported by the 10th Armor Regiment) were to follow ashore at Famagosta. The Livorno was to assemble on the right and advance and capture Fort Delimara. The Friuli was to press closer to shore and link up with the smaller beachhead at Larnaca.

Among the early reinforcements to the beachhead were the 10th *Armored* 27 *Semoventi* (self-propelled artillery), one of the better-designed Italian weapons of the war. Nineteen of them were armed with 47mm anti-tank guns, and eight had 75/18mm.

While Italian medium tanks were eventually to form the main armored element in the Axis attack, 20 German Panzer IIIs were also to be sent ashore. At the 30 April meeting between Hitler and Mussolini, the *Führer* even suggested using some captured heavy Soviet tanks in the assault, though nothing more had come of that suggestion by summertime.

After the XXX Corps was ashore, the XVI Corps (the Assietta and Napoli Infantry Divisions) would follow, using the same invasion beaches. It was to form on the left and advance across the island to cut it in half.

With the XXX Corps ashore and moving inland, the paratroopers were to take up a secondary defensive role on its left, while the infantrymen advanced to secure Marsa Scirocco Bay. With that area occupied and heavy artillery brought ashore, the final advance against the main British stronghold at Valletta could begin.

The Axis planners hoped a direct show-down attack on that fortress town could be avoided by cutting its water supply and placing it under close siege. If the British refused to give up, a general assault would go in after a great artillery bombardment fired from all points of access available around the Grand Harbor.

Lady Luck

There were three wild cards in the Axis hand. First, landing at night is never easy. While the invaders practiced a great deal, there is still no question that confusion (always present in any amphibious operation) would have been a key factor in the dark, especially among the less well trained follow-up waves.

Second, the quick capture of Marsa Scirocco Bay, along with at least one airfield, would have been critical. The former would have allowed the heavy artillery and a broader array of resupply to come ashore, while the latter was a prerequisite for the entry of the La Spezia Division (which later proved an excellent unit in Tunisia), and would also have functioned as a secondary supply point.

The third important element was the situation at sea. The Italian fleet would have had to defend the invasion convoy and control the local waters for at least two days (and possibly longer if the attack on Marsa Scirocco Bay ran into any delays). Daylight actions, given the good weather typical in the area during the summer, would have presented little problems for the Italians. But the potential night battles, at which the Royal Navy excelled, might have been decisive in defeating the invasion. However, the Italian navy did possess and use radar by 1942, and might have kept the British at bay — that is, if they even appeared, and if they survived the Axis air, torpedo boat and submarine gauntlet.

Cancelled

Of course, the planned attack described above was never to be. The reasons for its cancellation were straightforward. First, Rommel was so successful at Gazala and Tobruk he was able to persuade Mussolini and Hitler an advance deep into Egypt was possible without securing Malta. Second, Hitler was doubtful the Italian navy would come through with all it promised. He feared his elite paratroopers would end up isolated, and without any seaborne Italian troops to join them they would almost certainly have been annihilated on Malta. (Gen. Student always thought Hitler had decided to cancel the invasion even before Gazala, for just that reason.)

Thus one of the most-planned combined-arms operations of the war died stillborn.

When one considers that only one amphibious operation of any size failed in World War II (the initial Japanese landing on Wake Island), it is easy to draw the conclusion that Hitler's failure of will before Malta in 1942 helped lead directly to the Axis defeat at El Alamein later that year. The dearth of supplies arriving at Rommel's army — in no small part due to the interference of British forces operating from Malta — was decisive in turning the tide in the Mediterranean.

Field Marshal Kesselring, the *Luftwaffe* commander for the planned operation, later wrote in his memoirs, "the invasion would have been easy." ☛

The authors would like to thank John Burt, Dr. James J. Sadkovich, Harry Rowland, and the staff at the University of Malta for their suggestions and help on this article. Parts of it will appear in our forthcoming book, *Rommel and the North African Campaign*.

Naval, Military, Aviation Books

Receive your informative catalog by return mail. Send only \$5.00 for a 1-year subscription consisting of 4 issues.

Each catalog has 48 pages and contains approximately 1500 book listings. Catalogs are sent by 1st class mail.

Don't delay! Write now to...

Antheil
BOOKSELLERS

2177-C Isabelle Court
No. Bellmore, NY 11710

ARMIES IN MINIATURE

Almond, Andrea, Cheshire, Chota-Sahib, Hornet, Imrie-Risley, Le Cimier, Mil-Art, New Hope, Poste Militaire, Series 77, Tiny Troopers, Tradition 30, "Willies" and more!

Send \$2.00 for list to:



ARMIES IN MINIATURE



1745 Tradewinds Lane, Newport Beach, CA 92660
1-714-646-4471

OUR MILITARY REPRODUCTIONS ARE THE MOST AUTHENTIC CIVILWAR, WWI & WW2 UNIFORMS BEING SOLD TODAY!

UNIT ARMY
FORAGE CAPS

EXACT REPLICAS IN
EVERY DETAIL.

\$65.00 P.P.—Free catalog with order.

ILLUSTRATED CATALOG - \$4.50



NEW COLUMBIA



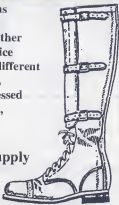
POB 327, BRANDON, VT 05733
or call TOLL FREE
1-800-383-5927



PATTON'S BOOTS from the North African Campaign

- Authentic reproductions
- Guaranteed fit
- Custom Made Black Leather
- Prompt courteous service
- Mail-order catalog with 16 different styles circa 1900-1943, send \$2.00 plus self-addressed stamped long envelope, Dealers welcome.

Cavalry Regimental Supply
Box 64394 - Dept CD
Lubbock, TX 79464



"Bonanza for Military History Buffs..."

—KIRKUS REVIEW

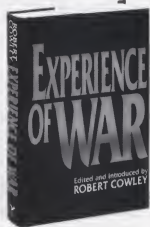
We think the best, most vigorous military history being written today can be found in a single publication—**MHQ: The Quarterly Journal of Military History**. Now the most outstanding articles from **MHQ** have been compiled in an exceptional anthology, **Experience of War**.

—BOOK-OF-THE-MONTH CLUB NEWS

A superb collection of articles from **MHQ: The Quarterly Journal of Military History** has been brought together in one volume. **Experience of War**, a newly published anthology edited and introduced by Robert Cowley, reflects the

grand scope of topics and renowned authors that have made **MHQ** must reading for all true military history enthusiasts. From stirring essays on the origins of war and in-depth looks at innovations in weaponry to contemporary analyses of past battle tactics, this comprehensive anthology is not only a distinguished addition to anyone's library but an excellent gift as well.

Experience of War retails for \$35, but as a **Command** magazine subscriber you can purchase it for just \$29.95, plus \$3 shipping and handling. Write to **MHQ—Anthology**, P.O. Box 597, Mount Morris, IL 61054-8038.



Here's a sample:

Jutland by John Keegan • *The Gunpowder Revolution* by William McNeill • *Ulysses S. Grant's Final Victory* by James M. McPherson • *The Secrets of Overlord* by Stephen E. Ambrose • *A Very Long Night at Cam Lo* by Ronald H. Spector • *The Origins of War* by Robert L. O'Connell • *The Last Word on the Lost Order* by Stephen Sears • *Alexander in India* by Arthur Ferrill • *The Gulf Crisis and the Rules of War* by Martin van Creveld • *Casey's German Gamble* by Joseph E. Persico • *Twilight Zone at the Pentagon* by Thomas B. Allen • *Cannae* by Victor David Hanson

You can charge
your order by
calling

1-800-
827-1218.

MHQ—Anthology, P.O. Box 597, Mt. Morris, IL 61054-8038.

As a **Command** magazine subscriber, I would like to purchase **Experience of War** at the discounted price of \$29.95—a saving of 14% off the retail price (plus \$3 shipping and handling).

☐ Payment enclosed ☐ Charge my ☐ Visa ☐ MasterCard

Account # _____

Exp. date _____ Signature _____

Name _____

Address _____

City/State/Zip _____

Make check payable to **Experience of War**. ACOMM



Authenticity
Guaranteed by
Mike Wooten

Authenticity
Guaranteed by
Mike Wooten

Authenticity
Guaranteed by
Mike Wooten

Genuine MIKE WOOTEN Print World Famous War Scene Artist

The scene depicted is the Skipper and officers on the bridge of U-123 as they return safely to base at Lorient, France, after their war patrol against the USA. This was the **FIRST** German U-Boat into American waters in World War II, and it sank the first ship in American waters in World War II. This patrol earned the **KNIGHT'S CROSS** for Captain Hardegen.

All prints **HAND-SIGNED** by Captain Hardegen, his First Watch Officer and his Second Watch Officer.

Limited Edition — only 500 ever made.

All prints numbered, and ownership is registered with **SHARKHUNTERS**.

Print Size is 18 x 19 inches

Acid-free heavy archival paper.

*100 plus \$5 shipping for the package.

FREE SHARKHUNTERS membership for the first 100 orders. 10% of all income derived from these prints is donated to the U-Boat Archive in Germany.

SharkHunters

P.O. Box 1539 Dept. C

Hernando, FL 34442

(904) 637-2917



Fax: (904) 637-6289

PACKAGE INCLUDES:

a print, a photo of the actual scene, and a certificate of authenticity—all beautiful and suitable for framing.

Refer to pg. 80 for our other ad



WARGAMERS CORNER

CAPE COD CONNECTION

Orders NEW 1-800-SAY-ORDER (800-729-6733) • FAX 508-455-5588

MODEM 508-420-1115 • Questions & Information 508-457-0739

Please add \$4.50 postage for UPS surface shipping. AK, HI, PR & Overseas calculated by weight. Newsletter \$4.00 per year.

CCC Preferred Customer Membership \$20.00 per year, 21 PLEASANT VIEW AVENUE, FALMOUTH, MA 02540.

Abalone Games	Civilization.....\$30.4
Abalone.....\$24	Civ. Trade Cards \$4
Marble Packs.....\$8	West Exp. Map.....\$8
Yellow, Orange, Red, Green, and Blue	Counter Trays.....\$2ea
American	D-Day.....\$16.8
Eagle Games	Dinos Lost Wild.....\$17
March Eagles Nap.	Diplomacy.....\$19
Rules.....\$8	Empire Arms.....\$28
Shenandoah Valley Campaign.....\$8	Flat Top.....\$32
Nep. Campaign. Iba	Flight Leader.....\$23
Australian	Gangsters.....\$24
Design Group	G. Guide Digi.....\$8
World/Flemish, \$48	General Mag's.....\$4ea
Days of Decision \$32	Gettysburg.....\$16
Upgrade Kit 4.5.....\$20	Hitler's War.....\$16
5th Ed Expans.....\$28	Kingmaker.....\$20
Repl. Counters.....\$20	Expan. Cards.....\$32.20
	Knights of Air.....\$20
	Kremlin.....\$16
	Expansion.....\$6.40
	Leg. Robin Hood \$13
	Lufthawfe.....\$24
	MBT.....\$25
	Midway (new).....\$16
	Coral Sea War.....\$35
	Nep. Bat. Expan.....\$13
	Nep.'s Battles.....\$20
	New World.....\$20
	Panzerblitz.....\$20
	Past Lives.....\$28
	Paydirt.....\$21
	Pletoen.....\$16
	Rail Baron.....\$20
	Rep. of Rome.....\$30.4
	Richthofen's War \$20
	Runesquest Del.....\$24
	Russian Camp.....\$15
	Russian Front.....\$21.6
	Siege Jerusalem \$28
	Speed Circuit.....\$20
	Stetis Pro BBall.....\$20
	Tac Air.....\$21
	Tactical.....\$12
	The Longest D.....\$68
	Thunder Cassi.....\$20
	Titan.....\$20
	Turning Pt. Statl.....\$19
	Expansion.....\$4.80
	Victory Pacific.....\$17.6
	War & Peace.....\$24
	Waterloo.....\$12
	Wizard's Quest.....\$17.6
	Wrasslin.....\$16

Avalon Hill
Squad Leader
Squad Leader.....\$24
Crossfire.....\$20
Cres. of Doom.....\$22.4
GI Anvil Victory.....\$29.6
SL Boards.....\$5ea

Advanced
Squad Leader
Adv. Sq. Ldr.....\$40
Yanks.....\$28.8
Beyond Valor.....\$32
Paratrooper.....\$17
Paratant.....\$15
West of Alamo.....\$40
Hollow Legions.....\$20
The Last Hurrah.....\$14
Red Barikades.....\$20
Code of Bushido \$32
Gung Ho.....\$40
Steeled Fire.....\$16
Hedgerow Hell.....\$16
ASL Annual 90.....\$12
ASL Annual 91.....\$12
ASL Annual 92.....\$12
BUY THEM
ALL BUNDLE.....\$299
UpFrontSeries
UpFront.....\$20
Banzai.....\$11
Desert War.....\$9.6
Adult Strategy Games
Midway (new).....\$16.8
1830.....\$20
Adel Verpflichtet \$20

Class of Arms
Bat. Bulge Book.....\$28
Bulge.....\$20
Comp. R.E. Lee.....\$31
Chancellorsville \$20
Civil War Treas.....\$20
Edelweiss.....\$34
Speed of Heat.....\$28.8
The Alamo Book.....\$16
Atlantic Cam Bk.....\$20
LaB. De Ligny.....\$38.4
LaB. Quat. Bras.....\$30.4

LaB. D'Auerst.....\$27.2	Sands of War.....\$28
LaB. Mont St. Jean Iba	S. of War Expan.....\$14.4
LaB. De Preussl.....\$35.2	Stand/Die Lmd.....\$55
LaB. D. Espagno Iba	Team Yankee.....\$19
Marching Grog \$20	Test of Arms.....\$20
Miss. Fortress.....\$20	Tet Offensive Lm \$32
Nep. at Leipzig.....\$27	Gathering Stm.....Iba
Eagle Drives.....Iba	GMT
The Emp. Return \$24	1863.....\$30
Warlord Union.....Iba	Air Bridge Vic.....\$27.2
Prelude Disaster \$27.2	Eagles in Snow.....Iba
Columbia	Gr. Bett. Alex.....\$32
Games	Hornet Leader.....\$24
Eastfront WWII.....\$44	Korea 1995.....Iba
Harworld 2ded \$20	Oper. Shoestr.....\$31.2
Quebec 1759.....\$24	SPQR.....\$32
Rommel/Desert \$28	Thunderb. Ldr.....\$25.6
Sons of Cities.....\$12.8	GRD
High Ground.....\$28	Balkan Front.....\$28
	Europe Meg's.....\$4ea
	Firing the East.....\$40
	First to Fight.....\$32
	Narvik Kit.....\$6
	Scorched E. 1.5.....\$48
	Secor. Earth Kt.....\$6
	Second Front.....\$20
	The Urals.....\$20

Emperor's Press
Nap's Grande A.....\$28
Prince Eugene-W \$20
Ancient Empires Iba
Empire Sed.....\$28
Age of Reason.....\$19
Revenge.....Iba
The Successors. Iba
Armies Danube.....Iba
Mem. Polish Lan \$24
Excalibur
Coen.....\$9
Cassino.....\$9
Hennibel.....\$33.6
Melekye '41.....\$20
Cry Heaven.....\$26
Seige.....\$26
Outermore.....\$30
Dark Blades.....\$30
Viking Raiders.....\$30

Games
August Fury.....\$26
Axis/Allies Exp.....\$14
Barron Victory.....\$26
Blood 110.....\$27.2
Bloody Rds Sou.....\$25.6
Force Eagles W.....\$29
Obj. Schmidt.....\$26
Omaha. Bdy Bch.....\$36
Stellingrad Pock.....\$17.6
Omega Games
Carrier War.....\$24
C. War Expan \$12.76
Desert Victory.....\$24
Vic. in Europe 2d \$16
Osprey Books
"Entire Line Carried"
Pursue Pennant
Pursue Pennant \$22
Cards.....\$22
Pursue Pennant Deluxe
Baseball.....\$36

RAF Military Books
Bat. Batoche.....\$10
Prus. Landwehr.....\$11
Brit. Military.....\$13
Ordn. Comm. C.W. \$10
Univ. Sold. Rules \$7
Red Eagle WWI Planes
Strat & Tactics
Carried
Slouth Pub
Queen's PkAff.....\$18
Manson Mord.....\$18
Consul Dec.....\$25

NFLIGHT TRAINING VIDEO'S.....CALL
A House Divided \$19.2
Armies 2nd WW.....\$12
Battlefield: Eur.....\$21
Bloody Kasser.....\$14.4
Blue Max.....\$20
Comm. Dec. 2nd \$19.2
Guil War Factbk.....\$10
Harpoon 90-91.....\$19.2
Harpoon Capt's.....\$21
Johnny Reb.....\$16

Strat-o-Matic	Wargamers Illus. \$6ea
Delux 8Ball.....\$29	
Steve Jackson Games Carried	WWW
Supremacy	Del. Roark's Dr.....\$31
C.inChief Man.....Iba	Light Division.....\$23
Field Mar. Man.....\$10	Mod. Nav B1.....\$17
Supremacy.....\$36	Mod. Nav. B2.....\$21
Suprem (New).....Iba	Mod. Nav. B3.....\$21
War Rm Map.....Iba	Nep. Later B1.....\$22
Worldwars.....\$12	R & Roundhill.....\$24
Task Force Games	SS Amerika.....\$40
Capt's Edition.....\$36	Tomorrow World. Iba
East Wind Rain.....\$20	Pr. Prince Quad.....Iba
Fed. & Empire.....\$36	WWII.....Iba
SFB Megahexes \$12	Zitelle Duet K.....\$20
SFB Mod R2.....Iba	
SFB Mod R3.....Iba	L'Armee France.....\$40
SFB: Tac. Man.....\$12	Milton Bradley
Capt's Log #8.....\$8	Battle Masters.....\$40
Capt's SSD Pack \$24	Fire & Fury Gr West
SFB Capt Basic.....\$20	Miniature Rules.....\$12
SFB Rulebook.....\$36	

ANNOUNCING
The CCC
Giveaway
TOSHIBA 28"
Stereo Remote
Control Color TV
For CCC
Members Only
All you need to do
is purchase from
CCC and your name
goes into the hat.
If we draw it on
December 10th, 1992
You'll get a
FREE TV!

CCC is your one stop shopping source.	We carry:
	> Tabletop
	Wargames &
	Role Playing
	Games
	> A2 Leather
	Bomber
	Jackets from
	\$160
	> VHS War
	Documen-
	taries & Flight
	Training
	Films
	> Replica
	Baseball

Command Magazine Article Index

Alphabetical — see pg. 76 for Topical Index

KEY

10:46 = Issue 10, page 46.
(SR) = Short Round Article

-A-

The Aggravating, Arcane Military Trivia Quiz 14:51
Alexander the Great 10:12
Amazing Money (SR) 13:11
An Ancient Weapon in Reuse (SR) 7:6
The Antarctic and World War II: War of the Markers (SR) 14:4
Armor Employment in Positional Warfare: The Korean War (SR) 3:6

-B-

Barbarossa: Misconceptions, Half-Truths, Lies and Savagery Unbridled — The Big Issues 1:11
The Battle of Narva, 1944 14:56
The Battle of Trenton (SR) 17:8
Battlewagons Eternal: A History of the Iowa Class Battleships 14:28
Benin Air Force Follow-Up (SR) 8:7
Berlin '45: The Potential for World War III 15:32
The Best Cannons in the World (SR) 2:5
Beware of Greeks Bearing Flutes (SR) 1:5
The Big Fear (SR) 12:6
Bombing Italian Style: The WWI Caproni Bomber (SR) 10:6
The Bozeman Trail Campaign: The Medicine Fight 11:58
Brad's Boys (SR) 2:14
The British Square at Ulundi, 4 July 1879 (SR) 14:7
Building (& Breaching) the Saddam Line (SR) 15:14

-C-

Caribbean Storm: Panama, 1989 4:23
Carrier Victory: The Battle of Midway 14:14
The Cavite Disaster (SR) 11:8
The Chaco: War for the Hell of It 12:12
Charles V: Military Ambition Too Big to Fit the Bottom Line (SR) 3:9
Chemical Warfare and Desert Storm 13:52
The Cheney Factor (SR) 15:12
A Christmas Gift for the Yankees: Japanese Attacks on the U.S. Mainland During World War II 11:48
The C.S.I.R. (SR) 4:9
The Cleanest Army in the World:

Pershing, the AEF and VD 15:28
Close Air Support in World War I—The Western Front 16:34
The Counsel of Your Fears 14:77
Coup d'Etat: A Primer 15:53

-D-

The Day of the Dupes (SR) 16:5
The Decline and Fall of the Benin Air Force (SR) 2:8
Deep Secrets and Black Projects (SR) 10:10
Desert Storm—Abbreviations & Acronyms (SR) 15:11
The Desert Storm Homefront (SR) 17:8
Desert Storm—Mother of All Battles 13:12
Desert Storm: Robert E. Lee or William Tecumseh Sherman? 17:38
Desert Storm Order of Battle (SR) 10:9
Desert Storm: Who Played (SR) 14:10
Devil Guns (SR) 16:7
A Document of the New World Order (SR) 15:13
DOWNFALL: American Invasion of Japan 3:16

-E-

The Eagle and the Bear—The Russo-Polish War of 1920 14:3
Eagles in the Sand—The Battle of Carrhae, 53 BC 16:45
Early Breech-Loaders (SR) 14:12
East Front Combat Philately (SR) 3:8
An Enjoyable Saturday Afternoon (SR) 1:8
Ethiopia: The Unconquered Lion of Africa 4:10
Ethiopia Revisited (SR) 12:9
The Evolution of German Machinegun Units in World War I (SR) 17:11
Evolution of Units in Wartime (SR) 11:7
Eyewitness to "Friendly Fire" 15:46

-F-

Factoids from Desert Storm (SR) 14:11
The Fate of the Wounded in the American Civil War 14:34
Field Rations (SR) 4:5
First American Intervention in Vietnam—May, 1845 (SR) 5:8
The First U.S. Airman Shot Down in Combat (SR) 16:8
5 Myths About Grenada (SR) 13:6
Fletching the Arrows: The Luftwaffe in Spain 1:52

Footnote to Operation Sealion (SR) 1:5
The Forgotten Front: The Indian Territory's Civil War 10:56
France's Allies in the Napoleonic Wars (SR) 11:7
Frigates! (SR) 13:10

-G-

German Battlegroups in World War II—Born of Necessity, Raised on Circumstance 16:69
German/Japanese Military Cooperation in World War II (SR) 16:9
German Operational Codenames in WWII (SR) 16:13
Gettysburg 17:12
Go Figure: Soviet Army Cutbacks in Europe (SR) 3:5
"Good Fence"—Israeli Guns and Money in Southern Lebanon 2:50
Good Ol' Boys (SR) 15:10
A Graver Threat Than Rebel Bullets: Infectious Disease and the Union Army 17:33
A Great Power Needs A Great Army? (SR) 12:8

-H-

The Hal Garrison & Wellington's Strategy at Waterloo (SR) 15:4
Hamburger Hill: Futile Tactics, Bankrupt Strategy 5:10
Happy Anniversary (SR) 2:15
The Heliograph (SR) 10:8
The Horse in America (SR) 7:11
Hougoumont: Rock of Waterloo 11:12
How the Lessons of the Malayan Emergency Were Ignored or Misused in Vietnam (SR) 11:9
The Huk Option—A U.S. Victory or Another Kind 16:74
"Humps!"—One hump or two? A Burning Question 3:48

-I-

I Remember...
Bomba, Paul [Battle of the Bulge] (SR) 1:10
Bomba, Paul [The Ruhr] (SR) 2:13
The Cavite Disaster (SR) 11:8
Christmas in Panama 4:43
Command and Control (SR) 6:10
A Desert Rat's Tale (SR) 15:6
Desert Storm—Female Medic 13:61
Desert Storm—Senior NCO 13:60
"Gorkhali Ayo!"—Gurkha Soldiers in the Battle for Imphal, 1944 16:52
Pearl Harbor, December 7, 1941 8:60
A Polish Soldier's Odyssey Through World War II 17:68
Safin, Bob [Vietnam] (SR) 9:8

Sergeant Caz [Vietnam] (SR) 5:9
The Western Front, 1918 12:48
Iraq Equivalents: U.S. Threat-
Assessment in the New World Order
(SR) 17:4
The Iraqi Republican Guard: Just How
Elite Were They? 13:44
It Is Balloon! 12:54

-J-

The Japanese Army in (and Around)
World War I 14:38
Japanese Military Wargaming in World
War II (SR) 17:9
Japanese War Museums Today (SR) 6:7
Jean Lafitte and the Battle of New
Orleans (SR) 14:8
Jutland: Clash of Dreadnoughts 8:12

-K-

Kadesh: Clash of Empires 7:12
The Karankawa Indians (SR) 17:7
Korean Propaganda Wars (SR) 1:7
Krim: The War in the Crimea, 1941-42
6:13

-L-

League of Nations Trading Cards (SR)
2:8
Let's Here it for the Huns! (SR) 13:4
Letters from El Salvador (SR) 8:8
Look-Down Radar in the Drug War
(SR) 2:7

-M-

The Marching Man 10:48
Marching Orders (SR) 10:7
McArthur's Gambit: Inchon to Seoul,
September 1950 9:12
Me. 262 (SR) 1:5
The Meiji Restoration and the
Confederate Navy (SR) 9:6
Money and Blood: The High Cost of the
Persian Gulf War (SR) 1:6
More Cards to Collect (SR) 4:6
Moscow's Fire Brigade: The Modern
Soviet Airborne (SR) 2:9
Murphy's Laws of Combat Operations
(SR) 13:10
Mysteries Unraveled [WWII] (SR) 6:6
Mysteries Unraveled—Sick Call in the
Union Army (Revisited) (SR) 8:6

-N-

Napoleon as Gamer (SR) 8:11
Naval Helicopters of World War II (SR)
9:10
New Light on the Iran Hostage Rescue
Mission 17:74
The Next Japanese-American War 17:45
1918: Storm in the West 16:16
1940: The BEF in France After Dunkirk
13:74

Nuclear-Weapons-Free Zones (SR)
16:14

-O-

Odessa: Tobruk on the Black Sea 6:48
One Brief Shining Moment: The Grant
Tank (SR) 12:7
The Opium Wars and the Opening of
China (SR) 13:7
Organization for Success: Operation
Urgent Fury, Grenada, 1983 (SR)
14:11
Organization of Today's Japanese
Army 14:6
Other Vietnam War POW Rescue
Operations (SR) 6:12
Otto Skorzeny and the Mossad:
Partners in Espionage? (SR) 8:7
The Ox and the Army (SR) 4:8

-P-

"Peace Now"—Palestinians and the
Israeli Army (SR) 6:8
Pentagon Tallies Cost of Persian Gulf
War (SR) 16:9
Pinkerton and His Numbers (SR) 16:4
The Plague of the Spanish Lady 16:40
Poland '39 17:54
The Price of Alliance (SR) 14:9
Public Health Consequences of the Iraqi
Civil War (SR) 15:11

-R-

Raid on Son Tay 5:17
The Rambo Legacy—The POW/MIA
Issue that Won't Die 16:63
The (Real) Problem With Soviet
Railways, 1941-42 (SR) 6:11

-S-

Saddam Hussein and the Palestinian
Intifada 13:54
Samuel Reed—American Privateer (SR)
12:10
"A Samurai Cannot Fail"—The
Imperial Japanese Army in World
War II 3:11
Sarge's Corollaries to Murphy's Laws
(SR) 16:6
SDI, GPALS, Red October Scenarios,
and Pentagon PR (SR) 14:5
Seaborn Threats to the Continental
U.S. in 1945 (SR) 11:6
Secrets of Japanese Sword Making (SR)
4:7
The Ship That Didn't Come In (SR)
3:10
Sick Call in the Union Army (SR) 6:12
Southern Soldiers in the Union Army
(SR) 12:11
A Soviet-Aligned Military Comparison:
1945 15:40

Spartacus: War of the Gladiators 15:16
Special Forces Have a New & Nasty
Surprise (SR) 16:12
Speculation: Did Desert Storm Avert
Mushroom Clouds? 13:57
Staying Alive: How Iraq's Dictator
Controls His Military (SR) 2:11
Stone Weaponry (SR) 7:8
The Strange Case of the 27th Maine (SR)
13:9
The Successors: Clash of the Generals,
323-301 BC 14:44
Sunrise of Victory—How Strategy's
End Turned the Tide in the East 2:16
Supply in the Greek-Persian Wars (SR)
7:8

-T-

Tacit Rainbow: Loitering on the Job
(SR) 3:7
Tank! The Development of Armored
Fighting Vehicles in World War I
15:67

THE REBELLION BEGINS!

Make history. Join this
sophisticated, multi-player,
play-by-mail Civil War
simulation. Six years in
development with detailed
economic, military, politi-
cal components. For
information call PSI

714-652-2568

P.S.I. • P.O. Box 568, Winchester,
CA 92596

The Best in Historical & Science Fiction Games!

A.H., G.D.W., Nova, Task Force, Victory,
F.G.A., GMT, Clash of Arms, Gamers,
3W, etc., plus... Play & Design AIDS
and Old and Rare Games

Hudson's
Hobby Games

Free Ship & Handle in the U.S.
Send for free catalog & monthly supplements.
Minimum 10% discounts special orders to 30%
discounts available overseas on orders over \$100.
We ship P&H, whenever possible.

P.O. Box 121503, Arlington, TX 76012



MILITARY HISTORY

FROM THE STONE AGE TO DESERT STORM

G-2 Military History Specialists features an extensive selection of books, maps, board games and computer simulations spanning the history of human conflict.

Four our complete catalog, send \$3.50 (\$5 foreign) to:

G-2 Military History Specialists
P.O. Box 1569
Dept. C3
Montclair, NJ 07042



World War II Books

Rare & Out-Of-Print Books on:

Eastern Front • Unit Histories • Marine Corps • Aviation • Nazi Germany • SS • Nazi Occupation • Naval

Write for latest Catalog to:

Paul E. Kisselburg
Harold's Book Shop
186-A W. 7th Street • St. Paul, MN 55102

ARTICLES of WAR Ltd.

Specializing in military history and reference books Over 10,000 new and used titles

Mail order our specialty for over 17 years International Visa, MasterCard and Discover Cards accepted



Prompt service, worldwide shipping
FREE catalog, please write

When in Chicago area stop and visit our shop.

8806 N. Bronx Avenue
Skokie, Illinois 60077-1823 • U.S.A.
(708) 674-7445

Tanks in the Press (SR) 17:10
Tar Wars: Arabian Oil and Politics, 312 BC (SR) 15:10
Teutoburgerwald: The Battle that Saved English 14:23
That Terrible Tuber—World War? You Want Fries With That? (SR) 6:6
The Thousand Year Garrison State: The Evolution of the Byzantine Army, 476 - 1453 AD 7:48
Tippecanoe and Tyler Too (SR) 16:10
"To the Glory of Our Country"—The Fenian Invasion of Canada, 1866 15:58
The Toledo War (SR) 9:9
Two Quotes From the Gulf (SR) 16:15
Typhus Fever & the Destruction of the Grand Army 11:22

-U-

Ukraine's Role in a Dying Soviet Union 8:48
Uncontested Enemies: The Role of Viet Cong Irregulars in the U.S. Defeat in Vietnam 5:22
US Armor in Vietnam (SR) 5:5
US Light Infantry on the Modern Battlefield 14:66

-V-

Vietnam Fact Cards (SR) 10:11
Vietnam: Victory of Revolutionary

Warfare Pt. 1 5:41
Vietnam: Victory of Revolutionary Warfare Pt. 2 6:24
Vietnam's War Machine Now Smothers Its Future (SR) 5:7

-W-

Weather War 13:70
What Goes Around Comes Around (SR) 4:5
What If?—German Plans to Invade Sweden in World War II 9:48
What's in a Name (Revisited)? (SR) 8:6
When Private Hendrix Kissed the Sky 1:54
Women in Desert Storm (SR) 15:5
Women in NATO Armies (SR) 12:8
A World in Chains: The "New World Order" of the Axis Powers 13:62
World War Zero: The Rise of Scientific Strategy in Ancient Greece 3:43

-X-

Xenophon: The March of the Ten Thousand, 401-400 BC 14:73

-Y-

Yet Another Disease: Tin Disease (SR) 12:8

-Z-

Zhukov's Plan to Attack Germany, 15 May 1941 (SR) 15:9

Command Magazine Article Index (by Period)

Ancient (3,000 - 500 BC)

An Ancient Weapon in Reuse (SR) 7:6
Beware of Greeks Bearing Flutes (SR) 1:5

Kadesh: Clash of Empires 7:12
The Ship That Didn't Come In (SR) 3:10
Stone Weaponry (SR) 7:8

Classical Antiquity (500 BC - 500 AD)

Alexander the Great 10:12
Eagles in the Sand—The Battle of Carrhae, 53 BC 14:45
Let's Here it for the Huns! (SR) 13:4
Spartacus: War of the Gladiators 15:16
The Successors: Clash of the Generals, 323-301 BC 14:44
Supply in the Greek-Persian Wars (SR) 7:8

Tar Wars: Arabian Oil and Politics, 312 BC (SR) 15:10
Teutoburgerwald: The Battle that Saved English 14:23
Xenophon: The March of the Ten

Thousand, 401-400 BC 14:73
World War Zero: The Rise of Scientific Strategy in Ancient Greece 3:43

Middle Ages (500 - 1500)

Early Breach-Loaders (SR) 14:12
The Thousand Year Garrison State: The Evolution of the Byzantine Army, 476 - 1453 A.D. 7:48

Early Modern Period (1500 - 1789)

The Battle of Trenton (SR) 17:8
Charles V: Military Ambition Too Big to Fit the Bottom Line (SR) 3:9
The Horse in America (SR) 7:11

Napoleonic Period (1789 - 1815)

Devil Guns (SR) 16:7
France's Allies in the Napoleonic Wars (SR) 11:7
Frigates! (SR) 13:10
The Hal Garrison & Wellington's Strategy at Waterloo (SR) 15:4

Hougoumont: Rock of Waterloo 11:12
 Jean Lafitte and the Battle of New Orleans (SR) 14:8
 Napoleon as Gamer (SR) 8:11
 The Price of Alliance (SR) 14:9
 Samuel Reed—American Privateer (SR) 12:10
 Tippecanoe and Tyler Too (SR) 16:10
 Typhus Fever & the Destruction of the Grand Army 11:22
 Yet Another Disease: Tine Disease (SR) 12:8

American Civil War

The Fate of the Wounded in the American Civil War 14:34
 The Forgotten Front: The Indian Territory's Civil War 10:56
 Gettysburg 17:12
 A Graver Threat Than Rebel Bullets: Infectious Disease and the Union Army 17:33
 The Meiji Restoration and the Confederate Navy (SR) 9:6
 Mysteries Unraveled—Sick Call in the Union Army (Revised) (SR) 8:6
 Pinkerton and His Numbers (SR) 16:4
 Sick Call in the Union Army (SR) 6:12
 Southern Soldiers in the Union Army (SR) 12:11
 The Strange Case of the 27th Maine (SR) 13:9

Other 19th Century Topics (1815 - 1914)

The Big Bear (SR) 12:6
 The Bozeman Trail Campaign: The Medicine Fight 11:58
 The British Square at Ulundi, 4 July 1879 (SR) 14:7
 Ethiopia Revisited (SR) 12:9
 First American Intervention in Vietnam—May, 1845 (SR) 5:8
 The First U.S. Airman Shot Down in Combat (SR) 16:8
 The Heliograph (SR) 10:8
 The Karankawa Indians (SR) 17:7
 The Opium Wars and the Opening of China (SR) 13:7
 The Ox and the Army (SR) 4:8
 "To the Glory of Our Country"—The Fenian Invasion of Canada, 1866 15:58
 The Toledo War (SR) 9:9

World War I Era (1914 - 1933)

Bombing Italian Style: The WWI Caproni Bomber (SR) 10:6
 The Cleanest Army in the World: Pershing, the AEF and VD 15:28

Close Air Support in World War I—The Western Front 16:34
 The Eagle and the Bear—The Russo-Polish War of 1920 1:43
 The Evolution of German Machinegun Units in World War I (SR) 17:11
 I Remember... The Western Front, 1918 12:48
 It Is Balloon! 12:54
 The Japanese Army in (and Around) World War I 14:38
 Jutland: Clash of Dreadnoughts 8:12
 The Marching Man 10:48
 1918: Storm in the West 16:16
 The Plague of the Spanish Lady 16:40
 Tank! The Development of Armored Fighting Vehicles in World War I 15:67
 Tanks in the Press (SR) 17:10
 That Terrible Tuber—World War? You Want Fries With That? (SR) 6:6

World War II

The Antarctic and World War II: War of the Markers (SR) 14:4
 Barbarossa: Misconceptions, Half-Truths, Lies and Savagery Unbridled—The Big Issues 1:11
 The Battle of Narva, 1944 14:56
 Berlin '45: The Potential for World War III 15:32

Brad's Boys (SR) 2:14
 Carrier Victory: The Battle of Midway 14:14
 The Cavite Disaster (SR) 11:8
 The Chaco: War for the Hell of It 12:12
 A Christmas Gift for the Yankees: Japanese Attacks on the U.S. Mainland During World War II 11:48
 The C.S.I.R. (SR) 4:9
 The Day of the Dupes (SR) 16:5
 DOWNFALL: American Invasion of Japan 3:16
 East Front Combat Philately (SR) 3:8
 Ethiopia: The Unconquered Lion of Africa 4:10
 Evolution of Units in Wartime (SR) 11:7
 Fletching the Arrows: The Luftwaffe in Spain 1:52
 Footnote to Operation Sealion (SR) 1:5
 German Battlegroups in World War II—Born of Necessity, Raised on Circumstance 16:69
 German/Japanese Military Cooperation in World War II (SR) 16:9
 German Operational Codenames in WWII (SR) 16:13
 Good Ol' Boys (SR) 15:10
 A Great Power Needs A Great Army? (SR) 12:8
 I Remember... Bomba, Paul [Battle of the Bulge]

BATTLE PLAN

Fight World War II yourself, by mail! YOU command one of the great powers of 1939, trying to accomplish your national goals by use of armies, navies, air force, diplomacy, propaganda, or industrial capacity. Every two weeks you and 12 other players from around the country mail us the instructions for your forces.

We type the orders into our computer, which calculates the combat, processes production, disallows illegal moves, and makes an individual printout for each player telling him what he is allowed to see. We provide the opponents, use our computer, and do all the work. You just have fun. Write today for our free catalog, or send \$2 for a copy of the rules for BATTLE PLAN, or send \$8 for the rules to ALL of our pbm (play by mail) games.

We accept MasterCard, Visa, or Discovercard.

Flying Buffalo Inc.
 Dept. C
 P.O. Box 1467
 Scottsdale, AZ 85252
 Play by mail since 1970.



(SR) 1:10
 Bomba, Paul [The Ruhr] (SR) 2:13
 "Gorkhali Ayol!"—Gurkha Soldiers in the Battle for Imphal, 1944 16:52
 Pearl Harbor, December 7, 1941 8:60
 A Polish Soldier's Odyssey Through World War II 17:68
 Japanese Military Wargaming in World War II (SR) 17:9
 Krim: The War in the Crimea, 1941-42 6:13
 Marching Orders (SR) 10:7
 Me 262 (SR) 1:5
 Mysteries Unrevealed [WWII] (SR) 6:6
 Naval Helicopters of World War II (SR) 9:10
 1940: The BEF in France After Dunkirk 13:74
 Odessa: Tobruk on the Black Sea 6:48
 One Brief Shining Moment: The Grant Tank (SR) 12:7

Poland '39 17:54
 The (Real) Problem With Soviet Railways, 1941-42 (SR) 6:11
 "A Samurai Cannot Fail"—The Imperial Japanese Army in World War II 3:11
 Seaborne Threats to the Continental U.S. in 1945 (SR) 11:6
 A Soviet-Allied Military Comparison: 1945 15:40
 Sunrise of Victory—How Strategy's End Turned the Tide in the East 2:16
 Weather War 13:70
 What If?—German Plans to Invade Sweden in World War II 9:48
 A World in Chains: The "New World Order" of the Axis Powers 13:62
 Zhukov's Plan to Attack Germany, 15 May 1941 (SR) 15:9

1945 to Present

Amazing Money (SR) 13:11

Armor Employment in Positional Warfare: The Korean War (SR) 3:6
 Battlewagons Eternal: A History of the Iowa Class Battleships 14:28
 Benin Air Force Follow-Up (SR) 8:7
 The Best Cannons in the World (SR) 2:5
 Building (& Breaching) the Saddam Line (SR) 15:14
 Caribbean Storm: Panama, 1989 4:23
 Chemical Warfare and Desert Storm 13:52
 The Cheney Factor (SR) 15:12
 The Decline and Fall of the Benin Air Force (SR) 2:8
 Deep Secrets and Black Projects (SR) 10:10
 Desert Storm—Abbreviations & Acronyms (SR) 15:11
 The Desert Storm Homefront (SR) 17:8
 Desert Storm—Mother of All Battles 13:12
 Desert Storm: Robert E. Lee or William Tecumseh Sherman? 17:38
 Desert Storm TO&E (SR) 10:9
 Desert Storm: Who Played (SR) 14:10
 A Document of the New World Order (SR) 15:13
 Eyewitness to "Friendly Fire" 15:46
 Factoids from Desert Storm (SR) 14:11
 5 Myths About Grenada (SR) 13:6
 Go Figure: Soviet Army Cutbacks in Europe (SR) 3:5
 "Good Fence"—Israeli Guns and Money in Southern Lebanon 2:50
 Hamburger Hill: Futile Tactics, Bankrupt Strategy 5:10
 Happy Anniversary (SR) 2:15
 How the Lessons of the Malayan Emergency Were Ignored or Misused in Vietnam (SR) 11:9
 The Huk Option—A U.S. Victory of Another Kind 16:74
 I Remember...
 The Cavite Disaster (SR) 11:8
 Christmas in Panama 4:43
 Command and Control (SR) 6:10
 A Desert Rat's Tale (SR) 15:6
 Desert Storm—Female Medic 13:61
 Desert Storm—Senior NCO 13:60
 Safin, Bob [Vietnam] (SR) 9:8
 Sergeant Caz [Vietnam] (SR) 5:9
 Iraq Equivalents: U.S. Threat-Assessment in the New World Order (SR) 17:4
 The Iraqi Republican Guard: Just How Elite Were They? 13:44
 Japanese War Museums Today (SR) 6:7
 Korean Propaganda Wars (SR) 1:7
 Letters from El Salvador (SR) 8:8
 Look-Down Radar in the Drug War (SR) 2:7

RED CHRISTMAS THE UNIFIED TEAM VS. TEAM U.S.A.



A Russian Nuclear Mole
 (NATO Codename: "Fire Ant")

In the year 2023, a brigade of Russian troops makes a daring raid on the underground Cheyenne Mountain A.F.B. in Colorado Springs, Colorado. Behind a series of blast doors, lies a three mile maze of tunnels and buildings that need to be secured before an American relief force arrives from nearby Ft. Carson.

RED CHRISTMAS blends modern warfare with a touch of science fiction to create a unique and exciting game experience. It's not every day that you can play a game where tank battles rage on the mountainside, gunships swoop down on their prey from above, nuclear moles burrow through solid granite, and infantry units can fight it out in the buildings of an underground complex or inside a one mile long airshaft. All this action is available now at your local hobby store or direct from Thunderhaven Game Company.

Intermediate Complexity • One or Two Players • Average Playing Time 5 hours

BOXED GAME INCLUDES: A Full Color 22x34" Mapsheet, 352 Backprinted 5/8" Counters, 52 Event Cards, A 24 Page Rulebook, An Order of Battle Card, Four Six-sided Dice, and a Cheyenne Mtn. A.F.B. Fact Sheet. Christmas Special: \$30. **Postage Paid** in the U.S.A.

LIMITED SUPPLY OF ZIPLOCKS NOW AVAILABLE (same great game minus the box and dice) \$24. **Postage Paid** in the U.S.A.



**SPECIAL CHRISTMAS OFFER
 FREE SHIPPING IN THE U.S.A.**

Foreign Airmail Add 25% of Order Value

THUNDERHAVEN GAME CO.

P.O. BOX 60954

PHOENIX, AZ 85082-0954



Call (602) 252-3442 for VISA/MasterCard Orders

McArthur's Gambit: Inchon to Seoul, September 1950 9:12
 Money and Blood: The High Cost of the Persian Gulf War (SR) 1:6
 Moscow's Fire Brigade: The Modern Soviet Airborne (SR) 2:9
 New Light on the Iran Hostage Rescue Mission 17:74
 The Next Japanese-American War 17:45
 Nuclear-Weapons-Free Zones (SR) 16:14
 Organization for Success: Operation Urgent Fury, Grenada, 1983 (SR) 14:11
 Organization of Today's Japanese Army (SR) 14:6
 Other Vietnam War POW Rescue Operations (SR) 6:12
 Otto Skorzeny and the Mossad: Partners in Espionage? (SR) 8:7
 "Peace Now"—Palestinians and the Israeli Army (SR) 6:8
 Pentagon Tallies Cost of Persian Gulf War (SR) 16:9
 Public Health Consequences of the Iraqi Civil War (SR) 15:11
 Raid on Son Tay 5:17
 The Rambo Legacy—The POW/MIA

Issue that Won't Die 16:63
 Saddam Hussein and the Palestinian Intifada 13:54
 SDI, GPALS, Red October Scenarios, and Pentagon PR (SR) 14:5
 Special Forces Have a New & Nasty Surprise (SR) 16:12
 Speculation: Did Desert Storm Avert Mushroom Clouds? 13:57
 Staying Alive: How Iraq's Dictator Controls His Military (SR) 2:11
 The Tacit Rainbow: Loitering on the Job (SR) 3:7
 Two Quotes From the Gulf (SR) 16:15
 Ukraine's Role in a Dying Soviet Union 8:48
 Uncounted Enemies: The Role of Viet Cong Irregulars in the U.S. Defeat in Vietnam 5:22
 U.S. Armor in Vietnam (SR) 5:5
 U.S. Light Infantry on the Modern Battlefield 14:66
 Vietnam Fact Cards (SR) 10:11
 Vietnam: Victory of Revolutionary Warfare Pt. 1 5:41
 Vietnam: Victory of Revolutionary Warfare Pt. 2 6:24
 Vietnam's War Machine Now

Smother's Its Future (SR) 5:7
 What Goes Around Comes Around (SR) 4:5
 What's in a Name (Revisited)? (SR) 8:6
 When Private Hendrix Kissed the Sky 1:54
 Women in Desert Storm (SR) 15:5
 Women in NATO Armies (SR) 12:8

Miscellaneous

The Aggravating, Arcane Military Trivia Quiz 14:51
 The Counsel of Your Fears 14:77
 Coup d'Etat: A Primer 15:53
 An Enjoyable Saturday Afternoon (SR) 1:8
 Field Rations (SR) 4:5
 "Humps!"—One hump, or two? A Burning Question 3:48
 League of Nations Trading Cards (SR) 2:8
 More Cards to Collect (SR) 4:6
 Murphy's Laws of Combat Operations (SR) 13:10
 Sarge's Corollaries to Murphy's Laws (SR) 16:6
 Secrets of Japanese Sword Making (SR) 4:7

ANOTHER GAMING DIMENSION... ...Gaming With Miniatures!

End the restrictions of hexagons, cardboard counters and always using the same terrain.

SAND, OIL, and BLOOD

Armored Combat in the 1990's

- Fast moving rules for modern armored combat
- Complete data and organizations for Desert Storm
- Refight battles from individual tanks up to Brigades

Experience the fast paced world of modern armored combat in 3 dimensions, only \$17.95.

COMING IN MARCH

BATTLELINE: MIDEAST

an SOB supplement on the Arab-Israeli Wars 1948 - present

Illustrated catalog of miniatures and gaming products \$3. MC/Visa accepted.

SIMTAC, Inc.

20 Attawan Rd
 Niantic, CT 06357
 (203)739-3609 voice/fax

SHIPS HISTORIES ONLY \$8.00 PHOTO'S ONLY \$10.00

We have Histories of all U.S. Naval, Army Transport and most Coast Guard. They are on fine parchment paper and suitable for framing. Also, partial up to date crew listing. Ships History \$8.00, Photos \$10.00, 11x14 \$22.00 B/W. Send name, address, year on ship. List of unken U.S. Ships \$2.00. Money back guarantee. Open Mon.-Fri. 9-5

Seaweed's Ship History

P. O. Box 545

Statenville, NY 26175

Info, Phone, Fax 304-652-1525

Or order, call 1-800-SEA-WEED

VISA



LIVE THE HISTORY OF THE U-BOAT



Monthly magazine with photos, diagrams, emblems & the history of one or more U-boats each issue—launch date, captains, victims and final fate! Regular input by top U-boat ace—Kretschmer, Topp Merten & others. Dives...expeditions...& more... For free information, send self-addressed, stamped envelope to:

sharkhunters

P.O. Box 1539, Dept. C
Hernando, FL 32642
(904) 637-2917



COLLECTORS: OVER 40,000 ITEMS

• **Nazi-Badges-Medals of all Nations**

postpaid. • **GERMAN WAR BADGES** • postpaid.



SUB-IRON CROSS-WOUND

Your choice any one—\$300 or all 3—\$2500. All are full size, not miniatures. These made from originals. Your choice WWI or WWII (please choose). We have most complete stock of WWI German badges-captions, etc. in U.S.

U-BOAT CAPTAIN'S CAP

White top Gold insignia and visor brass. Leather chin strap. Size 6 1/2. Worn \$1000. Knight's Cross with ribbon and oak leaf with sword \$2100.

For the back of your jacket: Flying Tigers Blood Chit Patch 7" X 11" gold reproduction—\$25.00 (your choice of American or Chinese flag)

GENERALS CAP

State 5, 6, or 7. Size 6 1/2. \$4500. Shoulder. Brass. Size 6 1/2. \$1000. Complete. Knight's Cross = \$2500. The Complete Set in STOCK. All = \$10750



AFRIKA-KORP. CAP & GOGGLES

German 1st W. ORIGINAL, send 1 each. Goggles. Still in their pouch pouch. Tan O.C. case = New REPL. O.C. Size 5, 6 or 7. Size, both only \$2500



WWII U.S. CAP

U.S. Officers Cap (new from original U.S. maker). Tan with brown leather visor, chin strap and U.S. Eagle pin. State Size 5, 6 or 7. \$660.00. Heavy new Olive Drab, Wool \$74.00

OVER 40,000 ITEMS IN STOCK. Postpaid. • Your 278-page fully illustrated CATALOG-\$5.00. Postpaid. (Send free with any order). W.W. 72, Box 2063-C, St. Louis, Mo. 63158

22 Years in same location

COMMAND READER SURVEY

Help us make *Command* into the magazine you want it to be by participating in this reader survey. Use the bound-in, postage-paid card to cast your ballot in the survey below. Vote by placing one whole number (only!) in the space on the postcard corresponding to each question.

Historical Era Preference

This numbered list refers to questions 1-4 printed below it.

0=Ancient (3,000 BC-500 BC)

1=Classical Antiquity (500 BC-500 AD)

2=Middle Ages (500-1500)

3=Early Modern (1500-1789)

4=Napoleonic Era (1789-1815)

5=American Civil War

6=Other 19th Century topics (1815-1914)

7=World War I era (1914-1933)

8=World War II

9=Modern (1945+)

1. List the one era about which you'd most like to see articles in the magazine.
2. List your second-favorite era for article coverage in the magazine.
3. List your third-favorite era for article coverage in the magazine.
4. List your least-favorite era for article coverage in the magazine.

This Issue

Please rate the contents of this issue using a 0-9 scale. "0" means you weren't even motivated enough to read that particular piece. "1" means you read it, but hated it. From there, "2," "3," "4," etc., each indicate a slightly more favorable opinion, until you reach "9," which means, "I can't imagine how this could've been a better article; I loved it."

5. Short Rounds
6. Cartés
7. Sword of Allah
8. Blood for Oil
9. Malta
10. This issue's cover art
11. Issue 20 overall
12. Compare this issue (na. 20) with the previous issue (na. 19).

0=I didn't see the previous issue.

- 1= This issue was better than the previous.
- 2= This issue was not as good as the previous.
- 3= The two issues were of about equal worth.

Advertisers Index

Australian Design Group	41
Antheil Booksellers	71
Armies in Miniature	71
Articles of War, Ltd.	76
Cape Cod Connection	73
Cavalry Regimental Supply	71
Crumwell Productions	10 & 11
Doubleday	33
Fifth Column Games	41
Flying Buffalo	77
Franklin Mint Precision Models	2
G-2 Military Hist.	76
GMT Games	BC
Game Designers Workshop	43
Games By Mail	32
Hamburger Hill	IBC
Harold's Book Shop	76
Hudson's Hobby Games	75
Inst. for Tactical Education	41
Jesse Jones	63
Owen D. Kubik Books	41
Military History Quarterly	72
New Columbia	71
PSI	75
Seaweed's Ship History	80
Sharkhunters	72 & 80
Simitco, Inc.	79
The Supply Line	41
Thunderhaven Game Co.	78
US Historical Society	42
Vietnam Veterans of America	IFC
W.W.#2 Ltd.	80

TACTICAL NOTEBOOK™

PO BOX 125

QUANTICO VA 22134

Hard-to-find information on tactics, weapons, and military organization. 20

articles - 40 pages - each month. Regular features include: Armies in China 1860-1949; Armies & Navies of 18th Century Europe; Armies of Europe & Asia 1875; Armies of WW I & II; Artillery; Colonial Armies 1900; Combat reports (WW II); German Army in 1887 and in WW I & II; Tactical Decision Games; Tactics Made Simple; Guderian's Newsletter. Send SASE for index and sample pages. Rates: 4 issues \$14; one year (12 issues) \$35.



20 3 12 21
 Mag 8 4 13 22
 1 9 5 14 23
 2 10 6 15 24
 3 11 7 16 25
 4 12 8 17 26
 5 Hobby 9 18 27
 6 1 10 19 28
 7 2 11 20 29
 Comments: 30

Name & Address

Or order by phone (1-800-488-2249) or fax (805-546-0570)

Subscription Rates

	Magazine only	Magazine with game
☐ 6 Mos/3 Iss	--	26.00**
☐ 1 Yr/6 Iss	17.95*	45.00**
☐ 2 Yrs/12 Iss	29.95*	80.00**

California residents add 7.25% sales tax.

* Foreign residents add \$2 per issue for postage.

** Foreign res. add \$2/issue surface mail, \$4/issue airmail.

MC/VISA#

Expiry Signature



PINS • PATCHES • CUPS • MUGS • BELT BUCKLES • BELTS

50 PAGE CATALOG - \$4.00

Personalized Combat License Frames

\$9.95
 Standard Frame includes: 1) Your War, 2) Your Large Unit and Crest, 3) One Key Year.
 4) Service Ribbon
 (Add \$3.95 P&H - \$6.00 outside continental U.S.)
 Please Describe Fully

Customizing

\$3.50 - For Small Unit, A Complete Tour, Ship, City, Etc.
 \$3.95 Crest or Medal, CMB, CIB
 Airborne Wings
 Maximum: 4/Auto Frame
 (Enamel/Metal Crests)

FreedomWear

50/50 Polycom T-Shirts \$14.95
 Hats \$8.95
 Sweatshirts \$22.95
 Sweatpants \$22.95
 Add \$2.95/shirt, \$6.00/shirt
 outside continental U.S. (M-XL)
 Add \$3.00 for XXL

MAIL TO:

Hamburger Hill
 Dept. VN-17
 3008 Rush Mendon Road
 Honeye Falls, NY 14472
 Tel: 716-624-5256
 Fax: 716-624-1578

Dealer Inquiries Welcome • Owned and Operated by 1st Cav Vietnam Vet 1969-70

Hamburger Hill

Full Line of Shooting Accessories Available

SHIPS HISTORIES ONLY \$8.00 PHOTO'S ONLY \$10.00

We have histories of all U.S. Navy, Army Transport and most Coast Guard. They are on fine parchment paper and suitable for framing. Also, parafix up to date crew listing. Ships History \$8.00, Photos \$10.00, 1x14 \$22.00 B/W. Send name, address, year on ship. List of unken U.S. Ships \$2.00. Money back guarantee. Open Mon-Fri, 9-5

Seawind's Ships History
P.O. Box 194
Shearville, WV 26175
Info, Phone, Fax 304-652-1525
Or order, Call 1-800-SEA WEED



LIVE THE HISTORY OF THE U-BOAT

Monthly magazine with photos, diag-
emblems & the history of one or mo
boats each issue—launch date, captain
times and final fate! Regular input by t
boat aces—Kretschmer, Topp, Mert
others. Dives...expeditions... & mor
For free information, send self-address
stamped envelope to:

sharkhunters
P.O. Box 1539, Dept. C
Hernando, FL 32642
(904) 637-2917



COLLECTORS: OVER 40,000 ITEMS • Nazi-Regime Models of all Nations • postpaid. • GERMAN WAR BADGES • post



SUB-IRON CROSS-WOUND
Your choice any one—\$10.00 or all 3—\$25.00. All are full size.
ture. These made from originals. Your choice WWI or W
phases. We have most complete stock of WWI German bad
ges, etc. in U.S.



U-BOAT CAPTAIN'S CAP
White top Gold insignia and
visor band. Leather chin
strap. Size 6 1/2. Limited
\$100.00 Knights Cross with
ribbon and oak leaf with
swords \$21.00.



GENERALS CAP
Black S. M. or L. Size = \$88.00
Black S. M. or L. Size = \$88.00
Cotton S. M. or L. Size = \$88.00
Cotton S. M. or L. Size = \$88.00
The Complete Set in STOCK
ALL 4 = \$350.00



AFRIKA-KORP. CAP & GOGGLES
German 1st Mt. Div. (SS) and 2nd Div. goggles.
Set in their pouch pouch. Tan Ole. caps = New REPLU
CA. Size S, M or L. Size. Both Only \$28.00



WW.II U.S. CAP
U.S. Officers Cap (new from
original U.S. maker). Tan
with brown leather chin strap
and U.S. Eagle pin. State
size S, M or L. \$68.00. Have few
Olive Drab. Wool \$74.00



OVER 40,000 ITEMS IN STOCK. Postpaid. (Sent free with any order).
W.W. 2 Ltd. Box 2063-C St. Louis, Mo. 63158
22 Name in same location

COMMAND READER SURVEY

Help us make *Command* into the maga-
zine you want it to be by participating in
this reader survey. Use the bound-in,
postage-paid card to cast your ballot in
the survey below. Vote by placing one
whole number (only!) in the space on the
postcard corresponding to each ques-
tion.

Historical Era Preference

This numbered list refers to questions 1-4
printed below it.

0=Ancient (3,000 BC-500 BC)

Advertisers Index

Australian Design Group	41
Antheil Booksellers	71
Armies in Miniature	71
Articles of War, Ltd.	76
Cape Cod Connection	73
Cavalry Regimental Supply	71
Crumwell Productions	10 & 11
Doubleday	33
Fifth Column Games	41
Flying Buffalo	77
Franklin Mint Precision Models	2

BUSINESS REPLY MAIL

FIRST-CLASS MAIL PERMIT NO. 514 SAN LUIS OBISPO, CA

POSTAGE WILL BE PAID BY ADDRESSEE

COMMAND MAGAZINE

P.O. BOX 4017

SAN LUIS OBISPO, CA 93403-9949

NO POSTAGE
NECESSARY
IF MAILED
IN THE
UNITED STATES



this could've been a better article; I loved
it."

5. Short Rounds
6. Cortés
7. Sword of Allah
8. Blood for Oil
9. Malta
10. This issue's cover art
11. Issue 20 overall
12. Compare this issue (no. 20) with the previous issue (no. 19).

0= I didn't see the previous issue.

- 1= This issue was better than the previous.
- 2= This issue was not as good as the previous.
- 3= The two issues were of about equal worth.



month. Regular features include: Armies in China 1860-1949; Armies & Navies of 18th Century Europe; Armies of Europe & Asia 1875; Armies of WW I & II; Artillery; Colonial Armies 1900; Combat reports (WW II); German Army in 1887 and in WW I & II; Tactical Decision Games; Tactics Made Simple; Guderian's Newsletter. Send SASE for index and sample pages. Rates: 4 issues \$14; one year (12 issues) \$35.

WWII
The Real Mother of All Battles
AND PROUD OF IT!

The Forgotten War

KOREAN WAR VETERAN
AND PROUD OF IT!

Korea
1950 - 1953

It's Time To Remember.

VIETNAM
We Were Always Right.
AND PROUD OF IT!

VIETNAM
C TROOP 19 CAV
1969-70

BRING THEM HOME

BRING THEM HOME

BRING THEM HOME

OR SEND US BACK

OR SEND US BACK

OR SEND US BACK

POW **VIETNAM** MIA

POW **KOREA** MIA

POW **WW II** MIA

PORK CHOP HILL
THE REAL MOTHER OF ALL BATTLES

VIETNAM
We Were Always Right.™

PERSONALIZED COMBAT LICENSE FRAMES

FREEDOMWEAR T-SHIRTS & SPORTSWEAR

1950-61 **DESERT SHIELD** 1969-71

2nd DESERT STORM 1991

1st DESERT STORM 1991

VIETNAM 1969-71

1950-61 **DESERT SHIELD** 1969-71

2nd DESERT STORM 1991

1st DESERT STORM 1991

VIETNAM 1969-71

1950-61 **DESERT SHIELD** 1969-71

2nd DESERT STORM 1991

1st DESERT STORM 1991

VIETNAM 1969-71

1950-61 **DESERT SHIELD** 1969-71

2nd DESERT STORM 1991

1st DESERT STORM 1991

VIETNAM 1969-71

1950-61 **DESERT SHIELD** 1969-71

2nd DESERT STORM 1991

1st DESERT STORM 1991

VIETNAM 1969-71

1950-61 **DESERT SHIELD** 1969-71

2nd DESERT STORM 1991

1st DESERT STORM 1991

VIETNAM 1969-71

VIETNAM 1969-71

VIETNAM 1969-71

VIETNAM 1969-71

KOREA 1950-53

KOREA 1950-53

KOREA 1950-53

WW II 1941-45

WW II 1941-45

WW II 1941-45

R.E.M.F.
& Proud of it

WHATEVER IT TAKES

WW II
The Real Mother of All Battles™

KOREA
It's Time To Remember.™

VIETNAM
We Were Always Right.™

VIETNAM
We Were Always Right.™

VIETNAM
We Were Always Right.™

VIETNAM
We Were Always Right.™

PINS • PATCHES • CUPS • MUGS • BELT BUCKLES • BELTS

50 PAGE CATALOG - \$4.00

Personalized Combat License Frames \$9.95
Standard Frame Includes: 1) Your War, 2) Your Large Unit and Crest, 3) One Key Year, 4) Service Ribbon
(Add \$3.95 P&H - \$9.00 outside continental U.S.)
Please Describe Fully!

Customizing

\$3.50 - For Small Unit, A Complete Tour, Ship, City, Etc.
\$3.95 Crest or Medal, CMR, CIB Airborne Wings
Maximum: 4/Auto Frame 3/Medal Frame
(Enameled Metal Crests)

FreedomWear

50/50 Polycotton T-Shirts \$14.95
Hats \$9.95
Sweatshirts \$22.95
Sweatpants \$22.95
Add \$2.95/shirt, \$6.00/shirt outside continental U.S. - M-XL
Add \$3.00 for XXL

MAIL TO:

Hamburger Hill
Dept. VN-17
3008 Rush Mendon Road
Honeye Falls, NY 14472
Tel: 716-624-5256
Fax: 716-624-1578

Dealer Inquiries Welcome • Owned and Operated by 1st CAV Vietnam Vet 1969-70

Hamburger Hill

Full Line of Shooting Accessories Available

The Art of War in the Classical World

NEW!

SPQR

The Roman Art of War

**Beneventum • Cannae •
Zama • Cynoscephalae •
Bagradas Plains**

SPQR is an exciting battle game recreating with great historical accuracy the Art of Warfare in the Roman Republic.

Based on a highly-refined and expanded Great Battles of Alexander game system, SPQR covers the development of the legion during the heyday of the Roman Republic with a focus on both playability as well as historical detail.

Five battles (including the bonus game) trace warfare from the supremacy of the phalanx to the ascendancy of the legion, 275 B.C. – 197 B.C. The game system includes an expanded Command System, plus new rules that capture the full flavor of each particular battle, including War Elephants, Roman artillery (scorpiones), and Cavalry Pursuit.



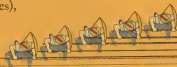
Game Designers:

Mark Herman

Richard Berg

Art Director:

Rodger B. MacGowan



The Great Battles of Alexander The Macedonian Art of War

**Gaugamela • Issus •
Granicus • Chaeronea**

The Great Battles of Alexander is an exciting battle game that challenges you to match the generalship of Alexander the Great in four of his most important victories – from his initial triumph over the hoplites of Greece to his final conquest of the massive armies of the Persian Empire, 338 B.C. – 331 B.C..

To win, you must balance audacity with shrewd calculation. If you are too conservative, your opponent can seize the initiative and crush your army before you can react. If you are too bold, your troops will disintegrate trying to obey your orders.

The simple game system focuses on leadership, unit cohesion, and troop quality. The result is a dynamic, fun-to-play game that captures the essence of ancient warfare, where the right gamble at the right time can change history.

Special Limited Print Run!

Alexander Battle Module

Juggernaut:

The Battle of Hydaspes, 326 B.C.

Alexander moves east, into India, to fight his final, major battle. Juggernaut includes a \$10 Off Coupon towards the purchase of Great Battles of Alexander or SPQR.

Game Features

SPQR Alexander

Number of Battles	Five	Four
Counters	800	600
Maps (22x34 inch)	Four	Four
Playing Time	2-8 hrs.	1-4 hrs.
Solitaire Playability	Yes	Yes
Scenarios	Multiple	Multiple
Special Rules	Yes	Yes

**GMT
GAMES**

Mail to:
GMT Games
310 W. Lacey
Hanford, CA 93230

Or, for faster service,
use our Toll Free
Order Line:

1-800-523-6111

(Fax) 209-582-7775

SPB-5

Quantity	Game	Price	Extended Price
	SPQR: Art of Roman Warfare	\$40.00	
	Great Battles of Alexander	\$40.00	
	Juggernaut Module	\$10.00	
	Thunderbolt+Apache Leader	\$32.00	
	Hornet Leader	\$30.00	
	1863: Four Civil War Battles	\$37.00	
	Silver Bayonet	\$20.00	
	Air Bridge to Victory	\$25.00	
	Operation Shoestring	\$30.00	
	Sub Total		
	(\$3.00 per game; International 10% Surface, 25% Air) Shipping		
	* 7.25% sales tax for CA residents		
	TAX*		
	TOTAL		

Name _____ (Please Print)
 Address _____
 City _____ State _____ Zip _____

CHECK ONE:
☐ Check enclosed (payable to GMT Games) ☐ Money Order ☐ Cash
☐ Charge my credit card. ☐ ☐
 Account No. _____ Exp. Date _____
 Signature _____